A Bibliography of Publications about the RISC-V Open Source Computer Architecture

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Title word cross-reference

#1 [Ano22].

$19\mu W$ [GAE+23]. ^{2} [MRGRCR+21b, PNSD20]. K [LPB+21]. $V_{\min}$ [ZCNA17].

-Boost [CPG+23, CRP+23]. **-means** [LPB+21].

0.37mm2 [WRD+17]. **0.80pJ** [MSZB19]. **0.80pJ/flop** [MSZB19]. **000-core** [DAKK19].

1 [CSZ+20, DEA+21, DtEt22]. **1-GHz** [CSZ+20]. **1.0** [PCW+22]. **1.24Tflop** [MSZB19]. **1.24Tflop/sW** [MSZB19]. **1.3GHz** [LWA+14]. **1.44** [SWW+22]. **1.44-GHz** [SWW+22]. **1.44GHz** [SWW+21]. **1.46TOPS** [GCL+23]. **1.7** [ZB19]. **1.7-GHz** [ZB19]. **1.89** [WBH+18, WBH+19]. **1.89-GHz** [WBH+18, WBH+19]. **10-bit** [DRC+16]. **12-nm** [LCG+23]. **12-Stage** [CXL+20a]. **12.4TOPS** [CRP+23]. **12.4TOPS/W** [CRP+23]. **123** [IVZV20]. **12nm** [GCL+23]. **136GOPS** [CRP+23]. **140-nW** [TBK+19]. **16** [SCM+21]. **16-bit** [RSA+23]. **16-mm2** [LCG+23]. **16-nm** [BRH+19, RZAH+19b, SWW+22, WBH+18, WBH+19]. **16.7** [LWA+14]. **160mV** [TLB+22]. **16mm2** [GZK+21]. **16nm** [BHR+18, RZAH+19a, SED+23, SWW+21, WRD+17]. **175** [WBH+18, WBH+19]. **175-kHz**

[WBH+18, WBH+19].

2 [CRP+23]. **2-Petaflop** [SB23]. **2-to-8b** [CRP+23]. **2.0** [HMJ22]. **2.5-D** [PKC+20]. **2.6GFLOPS** [GPV+22]. **2017** [BBdD17, SSB22, TZS+21]. **2019** [GD19, TBL19]. **2021** [IEE21]. **2022** [IEE22]. **22-nm** [CSZ+20, ZB19]. **22.1** [CRP+23]. **22nm** [DCC+23, GAE+23, GZK+21, MSZB19, SPDLP+22]. **24th** [BBdD17]. **256** [WYK21]. **256-Bit** [QLC20]. **26th** [TBL19]. **28** [UD20]. **28-nm** [CCA+18a, SAW+20, WSK+20, WCL23, ZCNA17]. **28nm** [LZW+15, ZLP+15, ZCNA16, CCA+18b]. **28th** [IEE21]. **29th** [IEE22]. **2n3m5k** [WRD+17].

3 [CPLS23, LMP23, TLB+22, VMO+23]. **3-D** [VMO+23]. **3-nW** [TLB+22]. **30** [SB23]. **30-Teraflops** [SB23]. **30-Teraflops/W** [SB23]. **32** [KFGH+23]. **32-Bit** [KS22, LCG+23, MLPH23, NHML+22, PMKZ22, DRC+16, DGA+17, GMV20, GSDB18, KM21, LCCS21, MCL22, MMGC20, NKH+21, RSR20, SFGB20, YTÖ21]. **32/64** [MG22]. **32/64-bit** [MG22]. **32I** [MRSBGR+20]. **32IC** [KK21]. **3D** [TEYK21, TYEK21, ZBA+20]. **3D-Graphics** [TEYK21, TYEK21].

4096-Core [ZSB21, ZSB20]. **410.0** [KFGH+23]. **410.0-B-32** [KFGH+23]. **45nm** [LWA+14]. **496-Core** [RZAH+19a]. **4MHz** [GAE+23].

5 [FFW20, FWZL19]. **511-Core** [DXT+18]. **55** [GCL+23]. **5G** [AHB20, BZVCB23, KKH+20, Raj21]. **5G-PUSCH** [BZVCB23].

6 [TBK+19]. **64** [LWC18]. **64-Bit** [LCG+23, MZZG22, PCO+23, ZB19, CXL+20a, GCL+23, HMTL21, KCGL23, MG22, SGP+23, WSG+21]. **65-nm** [PCO+23]. **65nm** [CCC+22]. **67mm2** [GCL+23]. **695** [RZAH+19a].

7 [SFGB20]. **7nm** [HMTL21].

8 [FRC+18]. **8-core** [CKTK22]. **8-to-64** [MSZB19]. **8.2-kHz** [TBK+19]. **8.7mW** [GPV+22]. **89** [DNN23]. **8b** [CRP+23].

910 [CXL+20a, CXL+20b].

ABI [AVS+22]. **Abstraction** [HZS+19]. **Academic** [ABC+20, DCC+23]. **Accelerate** [PMBA19]. **Accelerated** [EAMK21, EKAK22, KFS22, YWZL22]. **Accelerating** [AS18, DEA+21, DtEt22, DAKK19, ERGK21, GTC+20, TSS+22, ZPL+23, KKC+16]. **Acceleration** [ABW+21, AYA+23, CPG+23, CRP+23, DLMP21, FSS20, KSFS24, PLSK20, SB23, Su21, VMFL23, WZW+21, Yan20, KMS22, SCM+21, WWW23]. **Accelerator** [AEAS21, ABW+20, AWB+23, BCCM21, BDdD19b, CCC+19, DNN23, DXT+18, DYZ+22, FHY19, GZK+21, Gra16, GTCS21, JZWL23, JRD+23, KG22b, KYDÖ21, KBBA17, KZH22, LCF23, LNA21, NKH+21, OBSB23, PS22a, PLH+22, PACB21, PGW+20, QLH21, RSRT19, SNH22, TT22, TBR+22, WLI23, WXY+22, YYM21, ZZG21, ZHL+23, DKC+21, RPA22, TZ22, WRD+17, ZPRD21, ZZW+19]. **Accelerators** [ABM+23, GCL+23, HDT+20, KHG20, NHML+22, RHD+23, LWA+14, SFAAL22]. **Access** [MDR19, YWZL22]. **Accuracy** [CLR+21b, CLR+21a, RRC+20, LGB17]. **Accurate** [BHT+21, HGTD20, HGD20b, uhMSI19]. **Achieving** [SZHB21]. **acoustic** [SGCGCR17]. **Active** [PKC+20]. **Adaptive** [CPG+23, CRP+23, HGTD20, KG22a,

TBR+22, TLB+22, LZW+15]. **ADC** [DRC+16]. **Address** [GAMG+23, HYML23, WLW+21]. **Adjacent** [LLL+21]. **AES** [TA22, WYK21, ZPRD21]. **AES-256** [WYK21]. **affordable** [MRGRCR+21a]. **AFTAB** [RRJ+21]. **Against** [GTD+23, KNK+21, DGH19, WSUM19]. **age** [HP18]. **Agile** [HSL+23, HCZ21, LWC+16, PGW+20, XYT+22, XYT+23]. **AGILER** [KG22a]. **AI** [CV22, CPG+23, CRP+23, FRC+18, GMS+23, LCF23, TSABTM20, Yan20, ZJX20]. **AI-extended** [GMS+23]. **AI-IoT** [CPG+23, CRP+23]. **Aimed** [MRAM+23]. **Algebra** [FTRH20]. **Algorithm** [KZH22, LWD20, LPL22, QLH21, RFS20, MRGRCR+21b]. **Algorithms** [ABM+23, dAGM23, MGZ+23, MÇB22, NDZ+21, KMS22]. **All-Digital** [RZAH+19a]. **Alliance** [Ano23b]. **ALU** [RTRM19, RSA+23]. **Always** [EMMB19]. **Always-On** [EMMB19]. **AMS** [APHD21b]. **Analog** [WBH+18]. **Analog/Digital** [WBH+18]. **Analysis** [AKMS20, AKMS21, BHR+18, BRH+19, BB21, CTSG22, DHL+21, DRN+23, HSR+23, HCW23, IK21a, IZG22, KNK+21, LNZ+22, LVPSB+23, NGS20, POMD22, PNV22, SEM19, SSS+22, SML+22, SAW+20, SNOT20, TZS+21, VMO+22, WBH+18, WBH+19, WY23, ZB19, BMM+20, KSAL21, LGB17, RPSD16]. **Analyzing** [WSMRM20, YLC21]. **Android** [WWN23]. **ANDROMEDA** [MSR+21]. **ANN** [ZGMD22]. **ANN-based** [ZGMD22]. **AnnikaCore** [ZGL+21]. **Anomaly** [BPS+23, PCL+23]. **API** [SNOT20]. **Application** [DKT+23, GGÁARG+21, HMJ22, LCYK20, LHC+21, LCG+23, PLH+22, WT19, ZB19, ZKS+23, DL17, DAK+21, HH23, TSABTM20]. **Application-Class** [ZB19, DAK+21]. **Application-Specific** [GGÁARG+21, HMJ22, WT19, DL17]. **Applications** [ASE+21, And20, BP21, CRRS22, DWG+20, FSMU21, FDMM22, GRCRCG+20, GAO21, HM21, KM21, MLD+23, MPU+23, gMCP19, NBT22, OPY+18, PDLC18, RKH+23, RAPK23, RHD+23, SJR+23, SUM23, SSD+21, SR22, SKK+22, VSD22, WCGL23, ZGG23, ZXXH22, SCR+17, WTY+23, RLL+21]. **applied** [MRGRCR+21a]. **Approach** [LWC+16, MRB+23, NBT22, Suv21a, ZCH+23, PRP+23]. **Approaches** [HSEKD21]. **Approximate** [LGB17, SMOM19, VSD22]. **Approximations** [FFW20]. **Ara** [PCW+22, CSZ+20]. **Arbitrary** [AWB+23, JZWL23, ZZQ21]. **Architectural** [KKK+17a, KKK+17b, KKK+17c, MTAL22, MS17]. **Architecture** [ASH19, BP21, CPLS23, COMP19, CLW23, DBP21, DPP22, FHL+22, HBSE22, HYWP+19, HH21, HCP+21, HH22, HMJ23, HMJ24, JSB20, KHG20, KG22a, KG22b, KA20, KNK+21, KKH+20, LCCS21, LF22, LWC18, LHC19, Liu21, LNB+23, MKM20, MR22, MTT21, MAS18, MSJ19, MSD+22, MKVD23, MDR19, NRA+22, NGS20, PDLC18, PS22a, PKN+20, PKC+20, PW17a, PMKZ22, QYZ21, RKH+23, RSA+23, RMP+19, SVM+23, Sew21, SR22, SLB+22, TA22, WLY+22, WAH21, XHY+20, ZSB20, ZSB21, ZHC+18, ZWL+20, ZGL+21, ZZZ21, ZZZ+23, ZNF21, DPV+17, HP18, KSAL21, KHH22, Lu21a, Pat18, PRP+23, RPSD16, SCM+21, TCL+21, WTY+23]. **Architectures** [AKMS20, DXT+18, ERGK21, FTRH20, IVZV20, KKK+17a, KKK+17b, KKK+17c, NNPG23, PACB21, SMB17, BF23, CLC+20, GMFC23, LF22, VMFL23]. **Area** [MPU+23, MDR19, PSS23, SSD+21]. **Area-Efficient** [MPU+23]. **ARITH** [BBdD17, IEE21, IEE22, TBL19]. **ARITH-26** [TBL19]. **Arithmetic** [BBdD17, CLR+21b, CLR+21a, GD19,

IEE21, IEE22, SJM+20, TBL19]. **ARM** [AMRCP21, CRRS21, EHK20, ELG20, FTRH20, IVZV20, KS22, KKE+22, LF22, NGS20, RFS20, RMP+19, SNOT21]. **ARM-RISC-V-Heterogeneous** [EHK20]. **ARM64** [TOYK22]. **Armed** [DKT+23]. **Armv8** [Sew21]. **Armv8-A** [Sew21]. **Arnold** [SRD+21]. **Arrow** [AEAS21]. **ARV** [SC17]. **ASIC** [HSEKD21, HM21, KM21, NHML+22]. **ASIC-FPGA** [HM21]. **ASIP** [Ant22]. **Aspects** [AAA+21]. **Assembler** [GSDB18]. **Assembly** [TOYK22]. **Assessment** [GDR+22]. **Assisted** [DBGJ20, ZHX+22, GAMG+23, SMGS22]. **Associativity** [SSS+22]. **AsteRISC** [SLBJ23]. **Asynchronous** [LHT+21, NSM+23, SC17]. **At-Memory** [SB23]. **ATGP_RISC** [MKM20]. **ATGP_RISC-V** [MKM20]. **Atlas** [PW17a]. **Atomic** [WWL+20]. **atrial** [HUL+22]. **Attached** [CMV21]. **Attack** [DHL+21, DBP21, KNK+21, LHD+21, LHD+22]. **Attacks** [AVS+22, DGH19, GAMG+23, GWZS23, GTD+23, KGBH22, TDH+23, WSUM19]. **Attestation** [SMJ21]. **Augmented** [SRD+21]. **Aurora** [GMFC23, VMFL23]. **Authentication** [FdRES23, GLS21]. **Auto** [YCL+23]. **Auto-tuning** [YCL+23]. **Automated** [NSM+23, WXY+22]. **Automatic** [ABM+23, FDS+23, QYZ21, YWZL22]. **Automation** [MKM20]. **Automotive** [CSO+23]. **Autonomous** [DKT+23, RCS+19]. **Autovectorization** [AS22]. **AVR** [KKE+22]. **Aware** [LHK23, MKB+23, SMB17, SMOM19, LSB22]. **AXI** [EHN23]. **AXI-interconnect** [EHN23]. **AXI4** [DRC+16]. **AXI4-lite** [DRC+16].

B [KFGH+23, CPG+23, MZZG22]. **B-Extension** [MZZG22]. **backend** [TMK+16]. **Backup** [PPYB23]. **bad** [FvHC+23]. **Bandits** [DKT+23]. **Bandwidth** [WBH+18, WBH+19, ZZB+20]. **Banshee** [RSS+21]. **Bao** [MP20a, MP20b]. **Baremetal** [MTAL22]. **Barrel** [ABW+20, ABW+21]. **BARVINN** [AWB+23]. **Base** [PMKZ22]. **Baseband** [IFO+18, MB16]. **Based** [ABC+20, AKMS20, Ant22, AMG+20, BFC+23, BP21, BWP22, CXLL22, CDF+20, CYJ+22, CPLS23, DYZ+22, DMR+20, EMMB19, EEI+18, EGBS22, FSPB21, FDS+23, GZC22, GRC+19, GTC+21b, GXLW22, GAO21, GSDB18, HBSE22, HWJ23, HJ23, HCW23, HGLD18, HCZ21, HWG22, JHLD21, JHQ23, KAR+19, KHG20, KG22a, KEAS+18, KRR22, KZH22, LRF+21, LCYK20, LWC18, LHC19, LWD20, LCF23, LXC23, LPL22, LZH20, LLL+21, Lu22, LNB+23, MCL+21, MCL22, MLPH23, MTCL21, MLD+23, MST+23, MSR+21, MKB+23, gMCP19, MDR19, NWP+23, OBB+24, PKC+20, PACB21, PCO+23, POMD22, PNV22, QLH21, QYZ21, QLC20, RSR21, RSR20, RTRM19, RKRF21, RSS+21, RSRT19, RMR21, RHD+23, SJER23, SJM+20, SWWL23, SUAR23, SSB+19, SLB+22, Suv21a, Suv21b, TTB22, TBS+21, TBR+22, UD20, WT19, WZW+21, WWGW23, WCGL23, WMR+22, WWB23, WXY+22, WHB+22, WLC22, WGZ+23, XHY+20, YXH20]. **Based** [YYP+22, ZHC+18, ZWL+20, ZZZ21, ZCH+23, ZUSK23, ZZQ21, ZWL+23, ZSM20, ZSM21, ZS23, ZCNA17, ZNF21, ZZL+22, ZC23, dOTB+20, APSH+22, AvAG21, AFP+17, ASH19, BCCM21, BHT+21, CWD+21, Cil21, DBP21, DZZZ23, DRC+16, DGA+17, EAI19, FSMG+19, GRCRCG+20, GTC+21a, GGH+22, GBP21, GGÁARG+21, GLS21, HYXW22, HSL+23, HGD+19, HTGD21, HUL+22, IZG22, KG22b, KM21, KSSMRB23, MRSBGR+20, MRGRCR+21a, MRGRCR+21b, MSFK21, NRA+22, NKH+21, NBT22, RKH+23,

RLL+21, RMP+19, RPA22, RFS20, SGCGCR17, SFAAL22, SSD+21, SJYZ22, SCL+21, SKK+22, TZ22, TDPD+21, WRD+17, WWW23, WW19, WW21, YBR+23, YNYD23, YWZL22, ZPRD22, ZZW+19, ZZB+20, ZGMD22, ZHL+23, CKTG21, IFO+18, KFGH+23, AHB20]. **Basic** [BF23]. **be** [AP14]. **Behaviour** [BPS+23]. **Benchmark** [MRAM+23]. **Benchmarking** [CGG21]. **Berkeley** [Ano23a]. **Best** [DMR+20, KRR22]. **Between** [HGTD20, EHN23, IK21a]. **Biasing** [CPG+23, CRP+23]. **Binaries** [HGLD19]. **Binary** [KCGL23, KGHRM23, RSS+21]. **Bit** [BSSW21, JSB20, KS22, KAMS19, LCG+23, MLPH23, MZZG22, NHML+22, PCO+23, PMKZ22, QLC20, RSR21, ZB19, CXL+20a, DRC+16, DGA+17, GCL+23, GMV20, GSDB18, HMTL21, KM21, KCGL23, LCCS21, MCL22, MSZB19, MMGC20, MG22, NKH+21, RSR20, RSA+23, SGP+23, SFGB20, WSG+21, YTÖ21]. **Bit-Precision** [RSR21]. **Bits** [MTT21]. **BlackParrot** [PGW+20]. **Blake3** [ZPL+23]. **Block** [DPP22, KS22, LCN+23, MCL22, SEM19]. **Blocking** [DDM+20, JHQ23]. **Blocks** [ZWB19]. **Board** [CDF+20, RKH+23, ZSM21, TZPL21]. **Body** [CPG+23, CRP+23]. **BOOM** [Ano23a, BSZ+21, BSZ+24, ZBZ+23]. **BOOM-Explorer** [BSZ+21, BSZ+24]. **Boomerang** [LHK23]. **Boost** [CPG+23, CRP+23]. **Boot** [DBP21, GJC23, HYWP+19, NRLH22, Zha22]. **Bootable** [SGP+23]. **Both** [DMR+20]. **Bottleneck** [KFK+19]. **Branch** [CSM22, SLCK21]. **Bratter** [PKKK22]. **Brew** [Szk21]. **Buffer** [DBGJ20]. **Bug** [RMR21]. **Build** [Szk21]. **Building** [ILG19, LWC+16, WLY+22, ZWB19]. **bulk** [GAE+23]. **bus** [DRC+16]. **bus-based** [DRC+16]. **Byte** [ADF+23, DFA+23]. **C** [MRGRCR+21b, DUM+19]. **Cache** [CKTK22, CKTK23, CCA+18a, DDM+20, GCL+23, HWJ23, HJ23, LHD+21, LCG+23, MKB+23, SSS+22, ZCNA17, GYW+23, ZCNA16]. **Cache-Aware** [MKB+23]. **Cache-Coherent** [GCL+23, LCG+23]. **CADENCE** [RSA+23]. **CakeML** [TMK+16]. **Calib** [ZBZ+23]. **Calibration** [KKH+20]. **Can** [Szk21, PS22b]. **CAN-FD** [PS22b]. **CAP** [CKTG21]. **Capability** [GM21, MMD+22b, MMD+22c]. **Capable** [OBSB23, CIPR21, VTS+23]. **Capacitor** [ZLP+16, LZW+15, MSFK21, ZLP+15]. **Capturing** [TDPD+21]. **carbon** [AFP+17]. **CARE** [DBP21]. **Cars** [Ben23]. **Case** [APSH+22, BHD23, DCM23, GYW+23, HGLD19, HGJD20, PGTD23, RHGD21, SSR+18, WMGD23, YLC21, AP14]. **Case-Study** [APSH+22, BHD23, HGJD20]. **Casting** [KK23]. **Catalog** [HLHK19]. **CCSDS** [IVZV20, KFGH+23]. **Celerity** [DXT+18, RZAH+19b]. **Center** [Ano23g]. **Center-Class** [Ano23g]. **Certificates** [GLS21]. **CFG** [LWLA23]. **CFI** [LWLA23, RSM+23, ZPRD22]. **CGRA** [FGD+19, LNA21]. **ChaCha** [MPP21]. **Challenges** [LVPSB+23]. **Challenging** [NSM+23]. **Changeable** [KIS20]. **Channel** [DGH19, LHD+21, MTAL22, Bis21, GYW+23]. **Channels** [JHQ23, WSG+21]. **Characteristics** [Lu21b, WY23, ZZZ+23]. **Characterization** [CPWG23, SLK+21, SMMD23]. **Check** [TA22]. **CHERI** [BPS+23, Sew21]. **CHERI-RISC** [BPS+23]. **Cheshire** [OBSB23]. **China** [Ano23b]. **Chip** [DCM23, DEA+21, DtEt22, FSMU21, GPV+22, GTP+22, Gen24, OBB+24, RLL+21, RZAH+19a, TDPD+21, WSK+20, YLT22, DGA+17, Ano23e, CKTG21, CYJ+22, CRP+23, DNN23, HYWP+19, HZS+19, KSSMRB23, KCHYM19, LNB+23, MSDM23, NKH+21, RSR20, SLK+21, SML+22, SMMD23, SBJ21, ZNF21].

Chiplet [KIS20, ZSB20, ZSB21, ZGG23]. **Chips** [DXT+18, SG23, ZJX20]. **Chisel** [IK21a, XLZ23, ZCH+23]. **Chisel-Based** [ZCH+23]. **Choice** [HSR+23]. **CIFER** [LCG+23, ZPRD23]. **Cimone** [BFP+22]. **Cipher** [KS22, MCL22, TGMD21]. **Circuit** [WZW+19, KKC+16]. **Circuitry** [BBV+23]. **circular** [HC20]. **circular-shift** [HC20]. **CLARINET** [SJM+20]. **Class** [Ano23g, ZB19, DAK+21]. **Classes** [FAPHD23, JHQ23]. **Classic** [PGZMG21]. **Classical** [KGHRM23]. **Classification** [PLSK20]. **classifier** [SGCGCR17]. **CLIC** [MTCL21]. **Clocked** [PNV22]. **clocking** [LZW+15]. **Closed** [RHD+23]. **Closed-loop** [RHD+23]. **Closing** [HGD20a]. **Cloud** [CXL+20b, Su20, AAC+23, LF22]. **Cluster** [GPV+22, GTP+22, KMB22, MRB+23, NRB+23]. **Clustering** [LPB+21]. **Clustering-specific** [LPB+21]. **Clusters** [GRC+19]. **CMOS** [CKTK22, CKTK23, CCA+18a, CCA+18b, GAE+23, NWP+23, PCO+23, RZAH+19a, SED+23, WCL23]. **CNN** [GDR+22, HCL+21, LHC+21, LHC19, PLH+22, PMBA19, QLH21, SFAAL22, WLI23, WLC22, YYP+22, ZZG21]. **Co** [AvAG21, BPS+23, CPLS23, FSMG+19, HSL+23, HMJ22, Liu21, uhMSI19, POMD22, RFS20, WBH+18, ZWL+23, ZNF21, GAE+23, HP18, KHH22, RPD+15, YWZL22]. **Co-Design** [HMJ22, uhMSI19, RFS20, ZWL+23, ZNF21, BPS+23, HSL+23, Liu21, HP18]. **Co-Design-Based** [POMD22]. **Co-Designed** [WBH+18]. **Co-Processor** [CPLS23, AvAG21, GAE+23, KHH22, RPD+15, YWZL22]. **Co-Processors** [FSMG+19]. **Code** [GTD+23, HYML23, TA22, ZPRD23, TOYK22]. **Codes** [KGHRM23, TS20, WTS21]. **Coherent** [GCL+23, LCG+23]. **ColibriES** [RHD+23]. **Collaborative** [DYZ+22, YLT+23]. **Commercial** [CXL+20a, HSEKD21]. **commit** [HK20]. **Communication** [KIS20, PS22b, ZSM20, HC20, TCL+21]. **Communications** [RMF22]. **Compact** [DNN23, TBR+22, MRSBGR+20]. **Comparative** [CPWG23, IK21a, KSAL21, DAK+21]. **Comparison** [BWP22, ET21, HSEKD21, PNG20, WYK21, CRRS21, SCR+17]. **COMPAS** [SMGS22]. **CompaSeC** [GAMG+23]. **Compatible** [BBVB20, HLHK19, RKRF21, SGP+23, BGVB18, ETR+20, WRD+17]. **Compilation** [TZS+21]. **Compiler** [AS22, DCL23, GAMG+23, PNG20, SMGS22, WXY+22, TMK+16]. **Compiler-assisted** [GAMG+23, SMGS22]. **Complete** [FHL+22, WMR+22]. **Completion** [UD20]. **complexity** [NKTS23]. **Compliance** [BHGD21, HGD20a, HGD20c, HTGD21]. **Components** [ABC+20]. **Composable** [ZWB19]. **compressed** [KK21]. **Compressor** [IVZV20]. **Compromising** [Bis21]. **Computation** [uhMSI19]. **Computational** [MST+23]. **Computations** [Ant22]. **Compute** [CKTK22, CKTK23, DAKK19, GTP+22, LCG+23, SZHB21]. **Computer** [Ano22, BBdD17, HH21, HCP+21, HH22, IEE21, IEE22, KG22c, LF22, MSJ19, MKVD23, RKH+23, TBL19, TSW+23, HP18, Pat18, TZPL21]. **Computers** [BFP+22, KIS20, Pat17]. **Computing** [BDdD19b, CSM+21, CXL+20b, DYZ+22, FGD+19, FSMU21, GRC+19, ILG19, KBBA17, LWC18, MPU+23, NPA+23, PCW+22, PPYB23, SJBS21, TBSH22, WLW+21, XZW+22, Yan20, ZSB20, ZSB21, ZHL+23, Gre20, HYXW22, SCM+21, WWL+20, WTY+23, YWZL22]. **Computing-in-Memory** [ZHL+23]. **Concolic** [HGLD19]. **Conference** [GD19, IEE21, IEE22]. **Confidential** [XZW+22]. **Configurable** [BHT+21, HGLD18, KEAS+18, PKN+20,

RRJ+21, TGRK21, ZS23, HYXW22]. **Configuring** [FSMU21]. **Considered** [PW17b]. **Constrained** [APHD21a, ET21, dAGM23, JBK23, SMJ21, ZHLR22, SCL+21]. **Constraint** [FDS+23]. **Constraint-Based** [FDS+23]. **Constraints** [LHT+21, ZPRD21]. **Construction** [MCL+21]. **Consumption** [MTT21, MRAM+23, TDH+23, ZCH22]. **context** [LSB22]. **context-aware** [LSB22]. **Continual** [RRC+20]. **Control** [Ant22, ABW+20, KKH+20, PSM23, RLL+21, RHD+23, YLT+23, ZGG23, PKKK22, ZPRD23]. **control-flow** [PKKK22]. **Controlled** [AWB+23, FFW20, SNH22]. **Controller** [EAI19, GRCRCG+20, MST+23, MDR19, OBB+24, Suv21a, SKK+22, TL22]. **Controllers** [ZZG21]. **ControlPULP** [OBB+24]. **Conversion** [DCM23, RPD+15]. **Converters** [ZLP+16, LZW+15, ZLP+15]. **Convolution** [KSAL21, WZW+21, TZ22]. **Coprocessor** [BDdD19a, CMV21, DEC+18, FSMU21, HCL+21, LHC+21, LKKK22, LYL23, MPU+23, PSS23, SWWL23, WWGW23, ZWL+20, GBP21, PRS+15]. **Coprocessors** [CSM+21, LVR+20]. **CORDIC** [NKH+21, YYM21]. **CORDIC-based** [NKH+21]. **Core** [ASE+21, BBV+23, BZVCB23, BP21, CXL+20a, CKTK23, COMP19, DXT+18, EHK20, GST+17, GZK+21, GTD+23, GCCR21, GCR+23, HWJ23, HSR+23, HCP+21, HM21, IK21a, KHG20, KG22a, KM21, KKOY19, KSRT23, LRF+21, LKKK22, MMD+22a, MMD+22b, MMD+22c, MRAM+23, NWP+23, NKTS23, OBB+24, PDLC18, PLH+22, PAPJ+23, PMKZ22, PS22b, PMBA19, RZAH+19a, SGP+23, SAF+23, SLBJ23, SWW+21, SWW+22, SR22, SUAR23, SFGB20, SKK+22, TGRK19, TGRK21, VSD22, WLI23, WSG+21, WSK+20, WLC22, YLC21, YTÖ21, ZB19, ZSB21, dOTB+20, BCM+21, CKTK22, CYJ+22, DAKK19, EHN23, FvHC+23, GG18, HMTL21, Lu21b, MRSBGR+20, SJYZ22, TH22, WRD+17, WTY+23, ZSB20, ZPRD21, ZPRD23, HHTo23]. **core-based** [SJYZ22]. **CORE-V** [HHTo23]. **Cores** [ARH+22, BPM+21, BPF+22, CSM+21, Cho18, Cho19, ET21, FSPB21, FGD+19, GMS+23, GGÁARG+21, GRD22, HHB+19, JHL+21, JS23, KIS22, KG22c, LCG+23, MLPH23, NPA+23, OCMP19, OCC+17, SSR+18, SZHB21, SB23, Bar20, SBJ21, SCR+17]. **Core** [Ano23f]. **Correction** [Cho19, KFGH+23, KGHRM23, UD20, ZC23]. **Correlation** [DHL+21]. **Corruption** [BR24]. **Cost** [BPM+21, DCL23, RKH+23, RMR21, SG23, SLZ+20, ZB19, HWG22, RAPK23]. **COTS** [dOK23]. **Countermeasure** [DHL+21, GAMG+23]. **Countermeasures** [GTD+23, LBDPP19]. **Counters** [DRN+23]. **Coupled** [GKB+22, CMV21, JZWL23]. **Course** [LLS22]. **Coverage** [AKMS21]. **Covert** [MTAL22]. **Coyote** [PFD21]. **CPA** [TDH+23]. **CPK** [ZS23]. **CPU** [AWB+23, CWD+21, COMP19, GG18, IZG22, LKKK22, MCL22, MKČ23, MTAL22, MS17, Pat18, RKRF21, SNH22, SSB22, Szk21, WLC22, ZZZ21]. **CPU(R)** [TZS+21]. **CPUs** [CPWG23, GWZS23, HWJ23, JRW+23]. **Critic** [RBK18]. **Critical** [MKČ23, RLL+21, SKK+22, WMA+21]. **criticality** [CIPR21]. **Cross** [HGJD20, VOK+22, WWN23]. **Cross-layer** [VOK+22]. **Cross-Level** [HGJD20]. **Cross-Platform** [WWN23]. **Crypto** [RFS20]. **Cryptographic** [Bis21, DHL+21, HDT+20, MLPH23, MÇB22, SNK22, TDH+23, ZWL+23]. **Cryptography** [dAGM23, KGHRM23, LKKK22, NDZ+21, NHML+22, TGMD20, XHY+20, ZKS+23]. **Cryptoprocessor** [HBSE22, ZHC+18].

Cryptosystem [PGZMG21]. **CRYSTALS** [GJC23, NDZ+21]. **CRYSTALS-Dilithium** [GJC23]. **CSR** [BHGD21]. **Current** [AMG+20, HCW23]. **Custom** [CWS+23, CWS+24, DFA+23, HHB23, LHC19, LMP23, MRB+23, NKH+21, SNH22, Su21, PKL21, PJL21]. **Customizable** [SCM+21]. **Customized** [WZW+21, EHN23]. **Customizing** [MMD+22a]. **CV32A6** [HH23]. **CVA6** [MMD+22a, MTAL22, SVM+23]. **Cyber** [APHD21b, Ano22]. **Cyber-Physical** [APHD21b]. **Cyber-Security** [Ano22]. **Cycle** [GGH+22, uhMSI19, ZNF21, DPV+17, UD18]. **Cycle-Accurate** [uhMSI19]. **Cycle-True** [ZNF21].

D [PKC+20, VMO+23]. **D2** [PGTD23]. **DARKSIDE** [GTP+22, GPV+22]. **Data** [Ano23g, DAKK19, FHL+22, GLS21, KRR22, KGBH22, KK23, LWC18, LVPSB+23, RKRF21, Su21, TBS+21, ZHL+23, RPD+15, ZZB+20]. **Data-Flow** [FHL+22]. **dataflow** [GAE+23, YWZL22]. **Datapath** [HMJ23, HMJ24]. **Datapaths** [VROdlT22]. **DBPS** [LCN+23]. **DC** [LZW+15, WCL23, ZLP+15, ZLP+16]. **DC-DC** [LZW+15, ZLP+15]. **DCLS** [NKTS23]. **DCT** [HHB23]. **De-RISC** [WMA+21, WMR+22]. **Deblocking** [AS18]. **Debug** [LKHK23]. **Debugger** [RSR20]. **DECADES** [GCL+23]. **Decentralized** [GLS21, NBT22, SLMS21]. **Decimal** [uhMSI19]. **Decoder** [KFGH+23, SUAR23]. **Decoupled** [Ant22, MPU+23]. **Decryption** [AYA+23]. **dedicated** [BMM+20]. **Deep** [ABW+21, CRRS22, FHY19, HSL+23, KSAL21, SLCK21, TBR+22, CRRS21]. **Deeply** [JZWL23, QCL+23]. **Deeply-coupled** [JZWL23]. **Deflection** [KG17]. **Deflection-Routed** [KG17]. **delay** [LSB22]. **delegated** [CLM+22]. **Demonstrating** [PKL21]. **Dependable** [MSDM23, NPA+23]. **Deployment** [BCCM21]. **Depth** [KNK+21]. **Design** [BSZ+21, BSZ+24, CWD+21, CPLS23, CTSG22, DXT+18, DYZ+22, DZZZ23, FHD22, GZ22, GMS+23, GGH+22, GBP21, GXLW22, GKB+22, GMV20, GRD22, HWJ23, HSR+23, HH21, HH22, HYXW22, HSWM23, HMJ22, HGD+19, IK21a, KM21, LHC19, LCF23, LYL23, LHK23, LLS22, LZH20, LLL+21, Lu22, MCL22, MLPH23, MSSS23, MZZG22, uhMSI19, NKTS23, NSM+23, NRLH22, OPY+18, OCMP19, PDLC18, PKC+20, PAPJ+23, PGTD23, PCW+22, POMD22, PSZMM21, PNV22, QLC20, RSA+23, RFS20, RCS+19, SGP+23, SVM+23, SLBJ23, SJER23, SWWL23, SSB+19, SFGB20, SS22, TMR+19, TGT+23, WLY+22, WWGW23, WTY+23, YBR+23, YNYD23, YLT+23, YTÖ21, ZTC21, ZHC+18, ZWB19, ZGL+21, ZZZ21, ZGG23, ZZQ21, ZWL+23, ZNF21, BMM+20, BCM+21, Bar20, BPS+23, HSL+23, HP18, LF22, Liu21, RPSD16, SJYZ22]. **Designed** [Ano22, MMGC20, QLH21, WBH+18, DDM+20, ZZW+19]. **Designing** [CSM+21, MSJ19]. **Designs** [CPWG23]. **Detection** [GKB+22, HSWM23, HUL+22, HCL+21, LRF+21, LHD+21, LHC+21, LCF23, LXC23, PCL+23, PGTD23, UD20, KSAL21, LHD+22, SJYZ22, ZZW+19]. **Detection-Based** [UD20]. **Developing** [JHL+21, PCL+23, PHC+23, TSABTM20, XYT+22, XYT+23]. **Development** [And20, CRMR+23, EHN23, HCW23, SNM22, Suv21a, SKK+22, ZCH+23, Bar20, PKL21]. **Developments** [AAB+23]. **Device** [Lu21b, SB23, WHB+22]. **Devices** [ASH19, CWS+23, CWS+24, GST+17, HCL+21, JBK23, MRAM+23, MTJ+22, NPA+23, SMJ21, CTN18, EHN23, SCL+21]. **DFT** [ZCH+23]. **Diagnostic** [MGZ+23]. **Differences** [Cho18, Cho19]. **Different** [AKMS21, KIS22]. **Digit** [HSE+24]. **Digital** [CCC+19, GLS21, GJC23, HH21, HH22, HSEKD21, RZAH+19a, KSSMRB23,

TCL+21, Ano23f, WBH+18]. **Dilemma** [HCW23]. **Dilithium** [GJC23]. **Direct** [JRW+23, MDR19]. **Directional** [KG17]. **Disassembler** [GSDB18]. **Discussion** [APHD21a]. **dispatch** [HK20, KKC+16]. **DIV** [LGB17]. **Division** [HSE+24]. **DNA** [WHB+22]. **DNN** [AWB+23, ADF+23, CTN18, CPG+23, CRP+23, GPV+22, GTP+22, HM21, KSAL21, LCN+23, OGT+20, WXY+22]. **DOJO** [TSW+23]. **Domain** [HP18, OBSB23, XHY+20, ZXXH22, Pat18]. **Domain-Specific** [OBSB23, XHY+20, ZXXH22, HP18, Pat18]. **Domains** [DMR+20]. **Domestic** [WLC22]. **Dot** [KBBA17]. **double** [LWA+14]. **double-precision** [LWA+14]. **Driven** [DWG+20, MRB+23, FHD22, LKHK23, RCS+19, gMCP19]. **Drones** [Ben23]. **Drop** [HLHK19, YLT22]. **Drop-In** [HLHK19]. **DSP** [GST+17, LWD20, LYL23, Su21]. **Dual** [CYJ+22, HMTL21, KSRT23, SUAR23, WSK+20, EHN23, GMV20, NKTS23]. **Dual-Core** [SUAR23, WSK+20, CYJ+22, HMTL21, EHN23]. **Dual-Issue** [KSRT23]. **dummy** [LSB22]. **DuVisor** [CLM+22]. **DVFS** [TBK+19, TLS22]. **DVINO** [CCC+22]. **Dynamic** [BDdD19a, CMV21, CKTG21, DHL+21, KCGL23, LCN+23, PDLC18, TBK+19, TCH23, WW21, ZWL+20, PRP+23]. **Dynamically** [QLC20].

E203 [SJYZ22]. **Early** [HGLD19, LNZ+22, ZGD22]. **ECG** [HUL+22]. **Ecosystem** [AAA+21, EAM+22, uhMSI19, PNG20, TZPL21]. **ECU** [ZS23]. **ECUs** [CTSG22, CSO+23]. **EDA** [GG18]. **Edge** [AYA+23, CSM+21, CXL+20b, FRC+18, FSMU21, GPV+22, GTP+22, HSR+23, LCF23, MST+23, MTJ+22, NPA+23, OGT+20, RRC+20, Su20, TTB22, WCGL23, Yan20, GRC+19, SCM+21, WTY+23, Raj21, CV22]. **Edge-AI** [CV22]. **Edge-Computing** [CSM+21]. **Edition** [HH22]. **Education** [HCP+21, MSJ19, MKVD23]. **Educational** [SUM23]. **EEG** [LCF23]. **EEG-based** [LCF23]. **Effect** [AKMS20, CLWL21]. **Effects** [Cho18, Cho19, TAC+22, dOTB+20]. **Efficiency** [CPWG23, CLR+21b, CLR+21a, dAGM23, MAS18, LGB17, WWZL17]. **Efficient** [AHB20, BZVCB23, CSZ+20, DFA+23, DWG+20, EGBS22, GTC+21a, GTC+21b, HMJ23, HMJ24, HGJD20, IK21b, KIS22, KSRT23, LCN+23, MLD+23, MKB+23, MPU+23, PCW+22, RFS20, SNH22, SUAR23, TBSH22, ZZZ+23, ZKS+23, CSM22, EHN23, HUL+22, HCL+21, ZSB20]. **eFPGA** [GCL+23, LCG+23, SRD+21]. **eFPGA-Augmented** [SRD+21]. **EHE** [EGBS22]. **Eight** [CKTK23, SWW+21, SWW+22]. **Eight-Core** [CKTK23, SWW+21, SWW+22]. **Electronics** [SKK+22]. **Elementary** [CWS+23, CWS+24]. **elevate** [TZPL21]. **Embedded** [AvAG21, BCCM21, DBGJ19, DBGJ20, DK23, FSMU21, dAGM23, HGLD19, HWG22, JK20, KLP+20, KKOY19, KSRT23, LKHK23, MSP23, MTCL21, MZZG22, RAPK23, RHD+23, SMP22, SG23, SUM23, SAB22, SLB+22, TL22, WLI23, ZZG21, ZGMD22, ZGD22, ZHX+22, Ano20, DZZZ23, GAE+23, KKC+16, MP20a, MP20b, SFAAL22, ZJX20]. **Emission** [SG23]. **Emoji** [BJN23]. **Emotion** [LCF23]. **Empiricism** [SJM+20]. **EMS** [GG18]. **emulated** [MRGRCR+21b]. **Emulates** [LKHK23]. **Emulation** [CRMR+23, KEAS+18, OBB+24, PPYB23, ZZB+20, ZUSK23]. **Emulator** [LRB18]. **En/Decryption** [AYA+23]. **Enable** [PFD21]. **Enabled** [TGRK19, TGRK21]. **Enabling** [CKTG21, FSMU21, GTC+21a,

GTC+21b, MS17]. **Enclave** [SJBS21]. **Encoder** [KKEG22, ZPRD22, WWW23]. **Encryption** [AYA+23, Cil21, FdRES23, Lu22, PS22a, YXH20]. **End** [CPG+23, GM21, GTC+21a, GTC+21b, KHS+23, SRD+21]. **End-Node** [CPG+23]. **End-to-End** [GM21, KHS+23]. **Endpoint** [CWS+23, CWS+24, GST+17]. **Energy** [CSZ+20, CPWG23, DWG+20, ET21, FGD+19, GTC+21a, GTC+21b, HMJ23, HMJ24, HCL+21, KIS22, KSRT23, MTT21, MKB+23, MRAM+23, SNH22, WT19, ZB19, WWZL17]. **Energy-Efficient** [CSZ+20, DWG+20, HMJ23, HMJ24, KIS22, KSRT23, MKB+23, SNH22, HCL+21]. **Enforcement** [FHL+22]. **Engine** [ERGK21, YXH20]. **Engineering** [Sew21]. **enhanced** [HP18]. **Enhancement** [KK23]. **Enhancing** [ZKS+23]. **entropy** [SNM22]. **Environment** [BCZ21a, HDT+20, KHS+23, MCL+21, NSM+23, OCMP19, SNK22, SNOT21, BMM+20]. **Environments** [AVS+22, SMMD23, SGCGCR17]. **Epilepsy** [HSWM23, HCL+21, LHC+21]. **Error** [Cho18, Cho19, DXYZ19, GDR+22, GKB+22, KFGH+23, KGHRM23, LNZ+22, SJER23, UD20, VSD22, WCL23, YLC21, ZC23]. **Error-Correction** [KFGH+23, KGHRM23]. **Error-Resilient** [WCL23]. **Error-Tolerant** [VSD22]. **Errors** [ARH+22, FKS22]. **Esperanto** [DEA+21, DtEt22]. **Estimation** [KMB22, ZGMD22, ZGD22]. **ET-SoC-1** [DEA+21, DtEt22]. **ETC** [ZSM21]. **Ethereum** [GLS21, SLMS21]. **Ethernet** [CRMR+23]. **Ethical** [HSR+23]. **Europe** [AAC+23]. **European** [FDMM22]. **Evaluate** [VOK+22]. **Evaluating** [IVZV20, KCGL23, MAS18, MTJ+22, RZAH+19b, SNK22, dOTB+20, dOK23, GYW+23]. **Evaluation** [AS22, APHD21a, APHD21b, AMRCP21, BSSW21, CG23, DAPS21, DDM+20, FTRH20, FHD22, GMFC23, HJ23, HLHK19, HGD20b, HHB+19, ISM+23, JBK23, JS23, KIS22, uhMSI19, MÇB22, PPYB23, SSB22, TMR+19, ZZZ+23, FKS22, VMFL23]. **Even** [Szk21]. **Event** [BWZ+21, CLWL21, EGBS22, MST+23, MRB+23, Suv21b]. **Event-Based** [MST+23]. **Event-Driven** [MRB+23]. **Everyone** [RBK18]. **Exa** [TSW+23]. **Exa-Scale** [TSW+23]. **Exact** [KBBA17]. **Executed** [ZPRD23]. **Execution** [AVS+22, BCZ21a, BHD23, GZ22, GCCR21, GCR+23, HDT+20, IZG22, MCL+21, MAS18, SNOT21, TZG+23, ZHX+22]. **Experimental** [FKS22]. **Experiments** [CLC+20, CRRS21]. **exploiting** [TLS22, ZNF21]. **Exploration** [BSZ+21, BSZ+24, GRD22, HJ23, KG22c, LHK23, MSR+21, SVM+23, SLBJ23, TAC+22]. **Explorer** [BSZ+21, BSZ+24]. **Exploring** [CMV21, Lu21b, PGZMG21, RBK18, SG23, PJL21]. **Exposed** [HMJ23, HMJ24]. **Exposing** [TBS+21]. **ExSdotp** [BPF+22]. **Extend** [WZW+19]. **Extended** [GM21, JHLD21, KK23, MR22, SED+23, TCL+21, WLI23, GMS+23, HYXW22]. **Extending** [AS18, AHB20, FSS20, PS22b, PMBA19, TEYK21, TYEK21, VROdlT22, ZPRD21]. **Extensible** [HGLD18]. **Extension** [ABP22, AHV+21, BPF+22, CLC+20, CXL+20a, DAHK20, DCL23, GZC22, HVW+21, HCZ21, ISM+23, JSB20, JZWL23, KA20, KKOY19, KZH22, KFGH+23, KGHRM23, MCL+21, MC22, MTCL21, MZZG22, NDZ+21, PPS+19, PGZMG21, PSM23, RSR21, RMF22, SZHB21, TGMD20, TGMD21, WWL+20, WLW+21, WY23, YCL+23, ZHC+18, ZXXH22, ZKS+23, MB16, PKKK22, TZ22, VMFL23]. **Extensions** [CLW23, DBGJ19, FHD22, GTC+20, GST+17, dAGM23, GMK+23, KAMS19, LCN+23, LMP23, SPDLP+22, Su21, SNK22, YYP+22, MMR+17, TMR+19, ZJX20]. **Extraction** [GTD+23, LWLA23]. **Extreme**

[GPV+22, GTP+22, OGT+20, RRC+20, TTB22, SCM+21]. **Extreme-Edge** [GPV+22, GTP+22, OGT+20, RRC+20, SCM+21].

Fabric [DXT+18]. **Factors** [TDH+23]. **Fail** [TDPD+21]. **Fail-Reason** [TDPD+21]. **Families** [FDS+23]. **Fast** [BHT+21, DXT+18, HGTD20, HGD20b, MTCL21, MGZ+23, MMA+18, PLSK20, RSS+21, KHH22, WWZL17]. **faster** [CRRS21]. **Fault** [AKMS20, AMRCP21, BWZ+21, BMM+20, BCM+21, DKA+22, ELG20, GAMG+23, KNK+21, LBDPP19, gMCP19, POMD22, RMP+19, SLZ+20, SML+22, SMMD23, SMGS22, SR22, SUAR23, TAC+22, WW19, WW21, dOK23, JS23]. **Fault-Safe** [gMCP19]. **Fault-Tolerance** [RMP+19]. **Fault-Tolerant** [SLZ+20, SML+22, SMMD23, SR22, SUAR23, dOK23]. **Faults** [YLC21]. **Faulty** [AVS+22]. **FD** [CSZ+20, KCZ+17, MSZB19, PS22b, SAW+20, SPDLP+22, WSK+20]. **FD-SOI** [CSZ+20, KCZ+17, MSZB19, SAW+20, SPDLP+22, WSK+20]. **FDSOI** [DCC+23, UD18, UD20, ZB19, ZLP+15, ZLP+16]. **features** [MS17]. **Featuring** [GCR+23, DGA+17]. **FemtoRV32** [NWP+23]. **FFT** [JZWL23, VMFL23, WRD+17, ZZQ21]. **Fi** [WRD+17]. **fibrillation** [HUL+22]. **Field** [KGHRM23]. **Files** [Ano21]. **Filter** [AS18]. **Fine** [NRB+23, RSM+23, SAW+20, WSK+20, NKTS23]. **Fine-Grain** [NRB+23, WSK+20]. **Fine-Grained** [SAW+20, RSM+23, NKTS23]. **FinFET** [BHR+18, BRH+19, GCL+23, GZK+21, HMTL21, SWW+21, SWW+22, WRD+17, WBH+18, WBH+19, GAE+23]. **FIRECAP** [TDPD+21]. **FireSim** [FHY19]. **Firmware** [HGD+19, BCZ21b]. **First** [BFP+22, Gen24, SMP22, WMA+21]. **Five** [PMKZ22, CSM22]. **Five-Stage** [PMKZ22]. **Fixed** [Liu21, YCL+23]. **Fixed-point** [Liu21, YCL+23]. **FIXER** [DBGJ19]. **Flash** [BFC+23]. **Flash-Based** [BFC+23]. **FlexBex** [DAHK20]. **Flexible** [GTC+21a, GTC+21b, KKH+20, RSR20, SRD+21, Su21, DKC+21]. **Flip** [BWZ+21]. **Flip-Flops** [BWZ+21]. **Floating** [Ano20, BPM+21, CSZ+20, MSZB19, PSS23, PCO+23, SEG20, ZSB20, ZSB21, PRS+15, YWZL22, BDdD19b]. **Floating-Point** [Ano20, BPM+21, CSZ+20, MSZB19, PSS23, PCO+23, SEG20, ZSB21, ZSB20, YWZL22, BDdD19b]. **flop** [MSZB19]. **Flops** [BWZ+21]. **Florian** [PHC+23]. **Flow** [Ant22, DBGJ19, FHL+22, KMB22, PDLC18, PKC+20, SS19, SSB+19, WGZ+23, ZPRD23, MRSBGR+20, PKKK22, SJYZ22]. **FMA** [QCL+23]. **Forecasting** [CDF+20]. **Forest** [TTB22]. **Forest-Based** [TTB22]. **Formal** [CAL23, DMR+20, FAPHD23, GM21, Sew21, TBLD23, TAC+22, WMGD23, XLZ23]. **forward** [PKKK22]. **Four** [GZ22, LCG+23]. **Four-Stage** [GZ22]. **FP16** [TBR+22]. **FPGA** [APSH+22, BCCM21, CMV21, CKTG21, Cil21, DPV+17, DDM+20, DXYZ19, EAI19, FvHC+23, GAO21, GMV20, Gra16, GSDB18, HHB23, HCP+21, HSWM23, HM21, IFO+18, JSB20, KHG20, KG22b, KFGH+23, LCYK20, LCF23, MCL22, MLPH23, MFM+19, MSJ19, MSR+21, NHML+22, OBB+24, PLSK20, PSZMM21, QLC20, SUM23, SSB+19, SSD+22, TLS22, WSMRM20, WHB+22, WLC22, YLT+23, ZUSK23, ZCH22, ZC23, dOTB+20, dOK23]. **FPGA-Based** [CKTG21, IFO+18, KFGH+23, OBB+24, ZUSK23, APSH+22, Cil21, KG22b]. **FPGA-Optimized** [MFM+19]. **FPGAs** [BFC+23, HHB+19, KAR+19, KG17, MAS18, RTRM19, WW19, WW21, WWB23, ZZB+20]. **FPU** [BPM+21, PHC+23]. **Framework** [BSZ+21, DKA+22, EEI+18,

GMS+23, KEAS+18, LKHK23, LNA21, LHK23, MSJ19, MSR+21, NRA+22, SSR+18, SJM+20, SSD+22, ZBZ+23, ZNF21, BCZ21a, MS17, MRGRCR+21a, SCL+21]. **frameworks** [KSAL21]. **Fraud** [GLS21]. **Free** [DPP22, AP14]. **FreeBSD** [Hor20]. **FreeBSD/RISC** [Hor20]. **FreeBSD/RISC-V** [Hor20]. **Freedom** [Ano21]. **Frequency** [DHL+21]. **Frequent** [MTT21]. **FrodoKEM** [KFS22]. **fruit** [KSAL21]. **Full** [BHT+21, SZHB21, Sew21]. **Full-Platform** [BHT+21]. **Full-scale** [Sew21]. **Fully** [HC20, PS22a, WCL23, ZHL+23, Ano20]. **Fully-Homomorphic** [PS22a]. **Fully-Parallel** [ZHL+23]. **Function** [GZC22]. **Functional** [ASE+21, JRD+23, LPZ19, YLC21, MRSBGR+20, SC17]. **Functions** [CWS+23, CWS+24, LMP23]. **future** [AAC+23, TCL+21].

Galois [KGHRM23]. **GaN** [RLL+21]. **GaN-Applications** [RLL+21]. **Gap** [BB21, HGD20a, HM21, FRC+18]. **GAP-8** [FRC+18]. **Gateway** [CXLL22]. **Gateways** [RRJ+21]. **gem5** [RSRT19]. **General** [SNOT21, MRGRCR+21b, TZ22]. **general-purpose** [TZ22]. **Generated** [BHR+18, SBJ21]. **Generating** [EEI+18, GGÁARG+21, SBJ21]. **Generation** [BFP+22, FSPB21, FDS+23, GLS21, GD19, LNA21, LPZ19, TH22, TBLD23, Ben23, CSO+23]. **Generator** [Ano23e, Ant22, BRH+19, CKK+18, MKM20, TS20, TTDD21, WTS21, LSB22, SBJ21]. **Generic** [GTCS21, OPY+18, RKH+23]. **Genome** [LVPSB+23]. **Genotype** [MRB+23]. **Gesture** [ZWL+20]. **Getting** [Hor20]. **GFLOPS** [LWA+14]. **GFLOPS/W** [LWA+14]. **GHz** [CSZ+20, RZAH+19a, SWW+22, SPDLP+22, WBH+18, WBH+19, ZB19]. **Giga** [GCL+23, RZAH+19a, RZAH+19b]. **Giga-RISC-V** [RZAH+19b]. **Global** [WLW+21]. **GlobalPlatform** [SNOT20]. **Go** [SC17]. **GoblinCore** [LWC18]. **GoblinCore-64** [LWC18]. **golden** [HP18]. **GOPS** [GZK+21]. **GOPS/W** [GZK+21]. **GOST** [DNN23]. **GOST-28147-89** [DNN23]. **GPC** [LNB+23]. **GPGCN** [TZ22]. **GPGPU** [ETR+20, TEYK21, TYEK21]. **GPUs** [TSS+22]. **Grade** [WMA+21, WMR+22]. **Grain** [NRB+23, VROdlT22, WSK+20]. **Grained** [SAW+20, NKTS23, RSM+23]. **granularity** [HYXW22]. **Graph** [DYZ+22, TZ22]. **Graphic** [TSS+22]. **Graphics** [TEYK21, WY23, TYEK21, ZJX20]. **Grid** [CYJ+22, SLMS21, TS20, WTS21]. **GRVI** [Gra16]. **GVSoC** [BHT+21].

H.265 [AS18]. **H.265/HEVC** [AS18]. **HAMSA** [KSRT23]. **HAMSA-DI** [KSRT23]. **Hardened** [DAPS21]. **Hardened-by-Replication** [DAPS21]. **Hardening** [MSDM23]. **Hardware** [AKMS20, ABM+23, ARH+22, Ant22, AHV+21, Bau17, BPF+22, BPS+23, CTSG22, DBGJ20, DCM23, DYZ+22, DLMP21, EMMB19, EGBS22, FSS20, Gen24, GWZS23, GMK+23, HVW+21, HSL+23, HLHK19, KFS22, KSFS24, KEAS+18, KYDÖ21, KBBA17, Lu21a, MCL+21, uhMSI19, NRA+22, NKH+21, OBB+24, PGTD23, QLH21, RHS+22, RSM+23, RFS20, RHD+23, SMGS22, SWWL23, SJBS21, TML+17a, TML+17b, TML+17c, YXH20, ZHX+22, ZWL+23, ZHL+23, ZNF21, ZZL+22, DL17, HP18, SBJ21, SCM+21, TDPD+21, TCL+21, ZPRD21, ZZW+19]. **Hardware-Assisted** [ZHX+22]. **Hardware-In-The-Loop** [OBB+24]. **Hardware/Software** [DLMP21, RFS20, ZWL+23, HP18]. **Harmful** [PW17b]. **Hart** [USQ+22]. **Hash** [LMP23]. **Hawkbit** [SCL+21]. **Hazard** [DPP22]. **HD** [TBSH22]. **HDL**

[BBV+23, LCCS21]. **Healing** [ZZZ+23]. **Heaps** [DG22]. **HeapSafe** [DG22]. **Heterogeneous** [APSH+22, CPG+23, FGD+19, GCL+23, GPV+22, GTP+22, GZK+21, KG22a, RMP+19, VTS+23, WLC22, XZW+22, ZBA+20, WTY+23, EHK20]. **HEVC** [AS18]. **Hidden** [LBDPP19]. **Hierarchical** [BWZ+21]. **Hierarchy** [PKN+20]. **High** [Ano23c, Ano23d, AMG+20, BFP+22, BP21, CXL+20a, DNN23, FHL+22, GRD22, HBSE22, HK20, KZH22, LPZ19, LRB18, MMGC20, MZZG22, MPU+23, PAPJ+23, QCL+23, RLL+21, SJR+23, WLW+21, XYT+22, XYT+23, YXH20, ZZB+20, ZWL+20, ZCH+23, ZXXH22, ZCH22, ZHL+23, DKC+21, KHH22, MS17, WWZL17, WWL+20]. **High-bandwidth** [ZZB+20]. **High-Level** [GRD22, MMGC20]. **High-Performance** [Ano23c, Ano23d, BFP+22, BP21, LRB18, MZZG22, SJR+23, XYT+23, YXH20, ZXXH22, HK20, ZCH22, DKC+21, KHH22]. **High-precision** [ZWL+20]. **High-Quality** [LPZ19]. **High-Speed** [HBSE22, KZH22, RLL+21]. **High-Throughput** [DNN23]. **Highly** [BHT+21, LYZH20, PCW+22, ZSM21]. **Hint** [EGBS22]. **Hint-Based** [EGBS22]. **HIRMA** [SJR+23]. **Hits** [Gen24]. **HL5** [MMGC20]. **HLS** [CWD+21]. **Home** [LXC23, LZH20, Szk21]. **Home-Brew** [Szk21]. **Homomorphic** [AYA+23, PS22a]. **Hoplite** [KG17]. **Horizon** [AAC+23]. **Host** [OBSB23]. **Hot** [Szk21]. **Hotspot** [CPWG23]. **HPC** [OBB+24, PFD21]. **HPCG** [GMFC23]. **HPME** [YXH20]. **HULK** [VTS+23]. **HULK-V** [VTS+23]. **Hummingbird** [SJYZ22]. **Hunting** [RMR21]. **HW** [BDdD19a, KSSMRB23, RPA22]. **HW/SW** [KSSMRB23]. **Hybrid** [HJ23, KG22b]. **Hyperdimensional** [TBSH22]. **HyperSplit** [PLSK20]. **hypervisor** [CLM+22, MP20a, MP20b]. **Hz** [TBK+19].

I/O [MRGRCR+21b]. **ICs** [PKC+20]. **Identification** [FAPHD23, HCL+21, KGBH22, MGZ+23]. **identifying** [KSAL21]. **IEEE** [BBdD17, IEE21, IEE22, TBL19]. **II** [AHV+21, COMP19, HVW+21, WAH21]. **ILA** [HZS+19]. **Image** [GAO21, SG23]. **Impact** [Cho18, Cho19, KCGL23, VMO+23, YLT22, WSMRM20]. **Implantable** [AMG+20, GRCRCG+20, MRAM+23]. **Implement** [LCCS21, VOK+22]. **Implementation** [ABC+20, ASE+21, CTN18, Cil21, FWZL19, FHD22, GAO21, GSDB18, HHB23, HSWM23, HSEKD21, HMTL21, HM21, ISM+23, JSB20, KS22, KKE+22, LHC19, LZH20, LNB+23, MR22, NRA+22, NWP+23, NHML+22, PDLC18, PSZMM21, QLC20, RRJ+21, RSA+23, SJR+23, SUM23, SAF+23, SSB+19, SFGB20, SS22, SNOT20, TS20, TT22, TGT+23, TA22, VMFL23, WSMRM20, WWGW23, WTS21, WYK21, WHB+22, WLC22, YBR+23, YNYD23, YTL+23, YTÖ21, ZGL+21, ZZQ21, DZZZ23, EAI19, GBP21, GG18, KSSMRB23, SCM+21, ZJX20]. **Implementations** [SJER23, DAK+21]. **Implemented** [CCC+22, FdRES23, EHN23, SMGS22]. **Improved** [LWD20, HK20, JS23]. **Improving** [dAGM23, RAPK23, TLS22, ZZZ+23]. **Imputation** [MRB+23]. **In-Depth** [KNK+21]. **In-Hardware** [HLHK19]. **in-network** [DKC+21]. **In-Order** [SPDLP+22]. **In-System** [WDM22]. **including** [GCL+23]. **Increase** [VKG22]. **IndiRA** [TGT+23]. **induced** [FKS22]. **Industrial** [CXL+20a, YLT+23]. **Industry** [EAI19, LKHK23]. **Inevitable** [RK23]. **Inference** [AEAS21, ADF+23, DFA+23, GTC+21a, GTC+21b, GPV+22, GTP+22, GDR+22, NRB+23, OGT+20, PMBA19,

SB23, TTB22, TBSH22, GRC+19]. **Information** [MTAL22, PDLC18, POMD22, SS19, WGZ+23]. **Infrastructure** [ZZB+20]. **infrastructures** [AAC+23]. **ing** [DCM23]. **Injection** [AMRCP21, BWZ+21, DXYZ19, ELG20, JRW+23, KNK+21, LBDPP19, POMD22, WW21]. **Innovating** [CXL+20b]. **Input** [TLB+22]. **Insertion** [LSB22]. **Insights** [SG23]. **Inst** [RZAH+19a]. **Inst/s** [RZAH+19a]. **Instance** [BRH+19]. **instantiation** [DL17]. **Instruction** [AKMS21, AP14, CLW23, DAHK20, DDM+20, DMR+20, FSS20, FHD22, GZC22, GAMG+23, dAGM23, HMJ22, HMJ23, HMJ24, HCZ21, HZS+19, JSB20, JZWL23, JHLD21, JHQ23, JRW+23, KLP+20, KG22c, KGBH22, LPZ19, Liu21, MR22, NDZ+21, NKH+21, Pat17, PPS+19, PMKZ22, QLC20, RHGD21, SNH22, SUAR23, TBLD23, WZW+19, WZW+21, WLI23, WA21, WAH21, ZPRD22, ZHC+18, ZHX+22, ZZL+22, HYXW22, PKL21, PKKK22, Pat18, RPSD16, WLA+13, ZJX20]. **Instruction-Controlled** [SNH22]. **Instruction-Level** [HZS+19, KLP+20]. **Instruction-Set** [HMJ22]. **Instructions** [BSSW21, CWS+23, CWS+24, GCL+23, KAMS19, KKEG22, LYL23, MMD+22a, NNPG23, PW17b, RZAH+19b, KK21, LSB22, LGB17, PJL21, WWW23]. **Instructions/s** [RZAH+19b]. **Insulin** [YBR+23]. **INT** [SSB22]. **Integer** [ADF+23, PCO+23, PMKZ22]. **Integrate** [MMD+22a]. **Integrated** [GTCS21, KCZ+17, TLB+22, TCH23, WCL23, ZSM21, LZW+15, MSFK21, WRD+17, ZLP+15]. **Integrating** [FHY19]. **Integration** [KFGH+23, VMO+23, ZLC19, ZBA+20, HUL+22]. **Integrity** [DBGJ19, FHL+22, HYML23, TZG+23, TA22, ZPRD23, PKKK22]. **Intel** [CKTK22, CKTK23, NGS20, SNOT20, SNOT21]. **Intelligence** [MST+23, WCGL23]. **Intelligent** [GCL+23, GXLW22, HSR+23, LXC23]. **intended** [SGCGCR17]. **Intensive** [LWC18]. **Inter** [KIS20]. **Inter-Chiplet** [KIS20]. **Interconnect** [LLL+21, EHN23]. **Interface** [GTCS21, KIS20, MST+23, NRA+22, OPY+18, ZS23, SNM22]. **Interleaved** [BCM+21]. **Interleaved-Multi-Threading** [BCM+21]. **Intermittent** [PPYB23]. **Internal** [SNOT20]. **Internet** [DGA+17, SCR+17]. **Internet-of-Things** [SCR+17]. **Interposer** [PKC+20]. **Interposer-Based** [PKC+20]. **Interpreter** [GVT+22]. **interpreters** [KKC+16]. **Interrupt** [EHK20, MTCL21]. **Intrusion** [LXC23]. **Invasive** [TBLD23]. **Investigation** [OCC+17]. **INVITED** [DGH19]. **IO** [NAL22]. **IOT** [ZPRD21, ASE+21, ABP22, ASH19, BHT+21, CTN18, CXLL22, CWS+23, CWS+24, CPG+23, CRP+23, FRC+18, GTC+21a, GTC+21b, GST+17, HBSE22, HSR+23, LXC23, MLD+23, gMCP19, NBT22, PDLC18, SRD+21, SSD+21, TSABTM20, ZGL+21]. **IoT-Driven** [gMCP19]. **IP** [BBVB20, Bis21, BGVB18, HHB+19, KHH22, PPS+19, PH18, TL22, WDM22, ZCH22]. **IP-XACT** [PPS+19, PH18]. **IR** [YLT22]. **Irradiation** [SML+22]. **ISA** [AKMS21, AS18, ABP22, AHB20, BPF+22, BBVB20, BP21, BGVB18, FAPHD23, GTC+20, GBP21, GMK+23, HGD20c, IZG22, KGHRM23, LCN+23, LGB17, LVR+20, MAS18, MB16, PRS+15, SZHB21, SFGB20, TMR+19, TZ22, TBLD23, TEYK21, TYEK21, TML+17a, TML+17b, TML+17c, WA21, WGZ+23, YYP+22, ZTC21]. **ISA-Level** [FAPHD23]. **ISAs** [KRR22]. **ISE** [MPP21]. **Isolation** [CYJ+22, KLP+20]. **Issue** [EGBS22, KSRT23, SZHB21]. **ITUS** [KCHYM19].

Japan [TBL19]. **JIT** [DCL23]. **July** [BBdD17]. **June** [IEE21, TBL19].

Kernel [GPL22, HYML23, SMOM19, VMFL23]. **Key** [MLD+23]. **Keys** [DCEJ21]. **Keystone** [SNOT20, SNOT21]. **kHz** [TBK+19, WBH+18, WBH+19]. **Kid** [SEM19]. **Kitten** [GPL22]. **Klessydra** [CSM+21]. **Klessydra-T** [CSM+21]. **Kyoto** [TBL19].

LAC [FSS20]. **Languages** [WWN23]. **Large** [gMCP19]. **Large-Scaled** [gMCP19]. **Last** [CKTK22, CKTK23]. **Latency** [MLPH23, MST+23, RRC+20, RHD+23]. **Layer** [KYDÖ21, Suv21a, VOK+22]. **Layout** [PGTD23]. **Leakage** [Bis21, PAPJ+23, POMD22, TBK+19]. **Leakage-Suppression** [TBK+19]. **Learn** [LF22]. **Learning** [AEAS21, FHY19, HSL+23, RRC+20, SLCK21, SSD+22, TBR+22, KMS22]. **Left** [AS22]. **LeNet** [FWZL19]. **LeNet-5** [FWZL19]. **Length** [MAS18]. **Level** [CKTK22, CKTK23, DDM+20, FAPHD23, GMS+23, GRD22, HYML23, HJ23, HGJD20, HZS+19, MMGC20, RHGD21, WTZ+20, WGZ+23, YLT22, CLM+22, KLP+20, MRGRCR+21b]. **Level-1** [DDM+20]. **Leverage** [FDMM22]. **Leveraging** [RHD+23, KG22c]. **Libraries** [FTRH20]. **Library** [GRC+19, Liu21, SEG20, SNOT20, Ano20]. **License** [LRF+21]. **LiFi** [RSM+23]. **LiFi-CFI** [RSM+23]. **Light** [RSM+23, SLB+22, ZSM20, MMR+17]. **Light-weight** [RSM+23]. **Lightweight** [CRRS22, DBP21, GPL22, GTD+23, GJC23, HYWP+19, KKK+17a, KKK+17b, KKK+17c, LPB+21, MCL+21, MCL22, MLPH23, MLD+23, MÇB22, OBSB23, PHC+23, SZHB21, SMJ21, TBSH22, TGMD20, TGMD21, MPP21, MP20a, MP20b]. **Limitations** [RHS+22]. **line** [RCS+19]. **Linear** [FTRH20, GTD+23, ZGD22]. **LinearUCB** [ABM+23]. **Linux** [CIPR21, DRN+23, ILG19, OBSB23, PS22a, SGP+23, SMOM19, VTS+23, ZB19]. **Linux-Capable** [OBSB23, CIPR21]. **Linux-Ready** [PS22a, ZB19]. **LIRA** [SMJ21]. **LIRA-V** [SMJ21]. **lite** [DRC+16]. **LiteAIR5** [GMS+23]. **little** [Lu21b]. **little-core** [Lu21b]. **LLVM** [RSS+21, RSRT19, WY23]. **LLVM-Based** [RSS+21, RSRT19]. **Lo-RISK** [PAPJ+23]. **Localization** [SJER23]. **Lock** [NKTS23]. **Lock-Step** [NKTS23]. **Lockstep** [SAF+23]. **Logic** [EAI19, TBK+19, AFP+17]. **London** [BBdD17]. **Long** [QLC20, GMFC23, VMFL23]. **long-vector** [GMFC23]. **Look** [SMP22]. **Looking** [HGD20a]. **Loop** [OBB+24, RHD+23]. **Low** [ABP22, BPM+21, BPF+22, BP21, CCA+18a, CCA+18b, DCL23, FGD+19, GRC+19, GZK+21, HWG22, KM21, KSRT23, KMB22, LRF+21, LHT+21, MLPH23, MST+23, MRGRCR+21b, MRAM+23, MDR19, PHC+23, PAPJ+23, RKH+23, RAPK23, RMR21, RHD+23, SG23, SLZ+20, SED+23, SRD+21, SSD+21, SR22, SLCK21, TBR+22, ZCH22, DKC+21, ERGK21, GBP21, NKTS23, PCL+23, SCR+17, VTS+23, ZWL+20]. **Low-Area** [MDR19, SSD+21]. **Low-Cost** [BPM+21, DCL23, RMR21, SG23, SLZ+20, HWG22, RAPK23]. **Low-Latency** [MLPH23, MST+23, RHD+23]. **Low-level** [MRGRCR+21b]. **Low-Overhead** [SR22]. **Low-Power** [GZK+21, KSRT23, LRF+21, LHT+21, MRAM+23, MDR19, PHC+23, SED+23, SRD+21, SSD+21, DKC+21]. **Low-Precision** [BPF+22]. **Low-resource** [ZCH22]. **Low-Voltage** [CCA+18a, CCA+18b]. **LRCN** [LCF23]. **LTE** [WRD+17]. **LTE/Wi** [WRD+17]. **LTE/Wi-Fi** [WRD+17]. **LUT6** [LCG+23]. **LUT6/mm2** [LCG+23]. **LWE** [ZXXH22].

M [LWD20]. **M/T** [LWD20]. **Machine**

[AEAS21, MST+23, SWW+21, KKC+16, KMS22]. **Main** [ZGG23, GAE+23]. **mainframe** [Pat18]. **Management** [AHB20, EHK20, KCZ+17, PACB21, SAW+20, VOK+22, WSK+20, GG18]. **Manager** [Suv21b, TCH23]. **MANIC** [GAE+23]. **Manipulation** [BSSW21, JSB20, KAMS19]. **Manticore** [ZSB21]. **Manual** [WA21, WAH21]. **Many** [BZVCB23, KHG20, KG22a, OBB+24]. **Many-Core** [BZVCB23, KHG20, KG22a, OBB+24]. **Manycore** [GCL+23, KG22b, RZAH+19b, RZAH+19a]. **Mapping** [APSH+22]. **March** [GD19]. **Market** [Gen24, SEM19]. **Marsellus** [CPG+23]. **Massively** [Gra16]. **Matching** [TT22]. **Math** [Liu21]. **Matrix** [SSS+22, TBR+22, ZXXH22, GBP21]. **Matrix-Multiplication** [TBR+22]. **Maximizing** [LMP23]. **McEliece** [PGZMG21]. **McPAT** [ZBZ+23]. **McPAT-Calib** [ZBZ+23]. **MCU** [BPM+21, KKH+20, LRF+21, MGZ+23, YLT+23, YTL+23]. **MCU-Based** [LRF+21]. **MCUs** [BB21, TTB22]. **means** [LPB+21]. **Measurement** [SNOT21]. **Mechanism** [GLS21]. **Mechanisms** [DBGJ20]. **mediated** [GG18]. **Medical** [AMG+20, GRCRCG+20, KM21, MRAM+23]. **meet** [ZPRD21]. **MEG** [ZZB+20]. **Memories** [ZUSK23]. **Memory** [BR24, Cil21, DLMP21, GKB+22, KAR+19, KG22b, KLP+20, MST+23, MDR19, NAL22, RRC+20, SB23, SMOM19, TML+17a, TML+17b, TML+17c, TCH23, YXH20, ZZB+20, ZHLR22, ZHL+23, ZC23, DUM+19, GAE+23, WRD+17]. **memory-based** [WRD+17]. **Memory-Constrained** [ZHLR22]. **Memory-Latency-Accuracy** [RRC+20]. **Memory/Accelerator** [KG22b]. **MemPool** [VMO+23, VMO+22]. **Mesh** [RZAH+19a]. **Metadata** [VOK+22]. **Metamorphic** [RHGD21]. **MetaSys** [VOK+22]. **Metering** [WT19]. **Method** [CLWL21, DDM+20, DLMP21, GZC22, HCZ21, LHT+21, WZW+19, ZZZ+23]. **Methodologies** [DXT+18]. **Methodology** [LLS22, MMA+18, RTRM19, RMR21, XYT+22, XYT+23, Bar20]. **metrics** [GYW+23]. **MHz** [UD18]. **Micro** [BP21, GRCRCG+20, KNK+21, MTAL22, MST+23, DPV+17, RPSD16]. **Micro-Architectural** [MTAL22]. **Micro-Architecture** [BP21, KNK+21]. **Micro-Controller** [GRCRCG+20, MST+23]. **Microarchitectural** [BB21, CPWG23, Cho18, Cho19, GWZS23, WSG+21]. **Microarchitecture** [BSZ+21, BSZ+24, LHK23, SVM+23, TSW+23, TAC+22, ZBZ+23]. **Microarchitectures** [KIS22]. **Microcoded** [KG22c]. **Microcontroller** [DWG+20, MDR19, SJR+23, DRC+16, DGA+17, GAE+23, HUL+22, MRGRCR+21a]. **Microcontrollers** [KKE+22, RFS20, MRGRCR+21b]. **Microprocessor** [CTN18, HSL+23, KHS+23, PMKZ22, POMD22, QYZ21, SS22, TBK+19, UD18, UD20, WT19, WCL23, BMM+20, BCM+21]. **Microprocessors** [AMRCP21, LWC+16]. **Microscopy** [SG23]. **MicroTESK** [CKK+18]. **Millimeter** [KKH+20]. **Millimeter-wave** [KKH+20]. **Milliwatts** [RHD+23]. **MiniFloat** [BPF+22]. **MiniFloat-NN** [BPF+22]. **Minimal** [BKS22, JK20]. **Minimally** [TBLD23]. **MINOTAuR** [GCR+23]. **MIPS** [COMP19, MTJ+22]. **MIPS-II** [COMP19]. **Mitigate** [KFK+19]. **Mitigating** [GLS21]. **Mixed** [BRH+19, NRB+23, OGT+20, CIPR21]. **mixed-criticality** [CIPR21]. **Mixed-Precision** [NRB+23, OGT+20]. **Mixed-Signal** [BRH+19]. **ML** [DEA+21, DtEt22, HH23, SJER23].

ML-Based [SJER23]. **mm2** [LCG+23, LCG+23]. **Mobile** [KKH+20, USQ+22, ZSM20]. **Mode** [HMJ23, HMJ24]. **Model** [DAKK19, JS23, LCF23, MMA+18, TML+17a, TML+17b, TML+17c, SC17]. **Modeled** [PPS+19]. **Modeling** [GMS+23, PH18, RSRT19, ZBZ+23]. **Models** [GDR+22, TBLD23, TAC+22, TDH+23, KSAL21]. **Modern** [LF22, MP20a, MP20b]. **Modification** [KCGL23]. **Modular** [BPF+22, KAR+19, KHG20]. **Module** [TA22, WTZ+20, DZZZ23, MRGRCR+21b, TDPD+21, ZXXH22]. **Module-LWE** [ZXXH22]. **Modules** [AKMS21]. **Monitoring** [CTSG22, DEC+18, LYZH20, SMB17, ZHX+22]. **Monte** [BFP+22]. **MOPS** [GAE+23]. **MOPS/mW** [GAE+23]. **Morello** [Sew21]. **moreMCU** [SAB22]. **Morpheus** [AHV+21, HVW+21]. **Motorcycle** [ZS23]. **Moving** [DAKK19]. **MPSoC** [EEI+18, LVR+20, MSR+21, NRA+22, NRLH22]. **MPSoCs** [KAR+19, KEAS+18]. **MRAM** [GAE+23, HWJ23, HJ23, ZBA+20]. **MRAM-Based** [HWJ23]. **MS** [DUM+19]. **Multi** [BKS22, BBV+23, BCM+21, CXL+20a, DKT+23, EHK20, GZK+21, HWJ23, HSL+23, HH23, KYDÖ21, KHS+23, LRF+21, OCC+17, PCO+23, PNV22, SGP+23, TH22, VROdlT22, WTY+23]. **Multi-Accelerator** [GZK+21]. **Multi-Armed** [DKT+23]. **Multi-Core** [BBV+23, CXL+20a, EHK20, GZK+21, HWJ23, LRF+21, SGP+23, TH22, WTY+23]. **Multi-Grain** [VROdlT22]. **Multi-Layer** [KYDÖ21]. **Multi-objective** [HH23]. **Multi-Precision** [PCO+23, HSL+23]. **Multi-Target** [KHS+23]. **Multi-tasking** [BKS22]. **Multi-threaded** [OCC+17]. **Multicore** [CDF+20, DAKK19, IK21b, JHL+21, PHC+23, PACB21, PGW+20, VMO+22, VMO+23, FKS22]. **Multiple** [BDdD19b, FGD+19, KKEG22]. **Multiple-precision** [BDdD19b]. **Multiplication** [CPLS23, ERGK21, KZH22, SSS+22, TBR+22, GBP21]. **Multiplier** [VSD22]. **Multiprecision** [CSZ+20]. **multiPULPly** [ERGK21]. **Multirate** [BHR+18]. **Multithreaded** [CSM+21, EGBS22]. **Mutation** [FAPHD23, HTGD21]. **Mutation-based** [HTGD21]. **Mutation-Classes** [FAPHD23]. **mW** [GAE+23].

Nano [Ben23, KMB22]. **Nano-Drones** [Ben23]. **Nano-UAV** [KMB22]. **Nanosatellite** [RKH+23]. **nanotube** [AFP+17]. **NanoWattch** [TLB+22]. **Native** [WWN23]. **natural** [SGCGCR17]. **Navigation** [KMB22]. **Near** [CKTK23, GST+17, MGZ+23, UD20, WCL23, ZZB+20, CKTK22]. **Near-data** [ZZB+20]. **Near-Sensor** [MGZ+23]. **Near-Threshold** [GST+17, UD20, WCL23]. **NEC** [GMFC23, VMFL23]. **Negative** [HGD20a]. **NEORV32** [BFC+23]. **Network** [ABW+21, CRRS22, GRC+19, KSAL21, LHD+22, LPL22, NRA+22, NBT22, RZAH+19a, SLMS21, DKC+21, HC20, HUL+22, TZ22, WWZL17]. **Networks** [ERGK21, GTC+20, GTC+21a, GTC+21b, NRB+23, RHD+23, Suv21b, CRRS21]. **Neumann** [KFK+19]. **Neural** [ABW+21, CRRS22, ERGK21, GRC+19, GTC+20, GTC+21a, GTC+21b, KSAL21, LPL22, NRB+23, RHD+23, CRRS21, HUL+22, TZ22]. **Neuromorphic** [FSMU21, MST+23, RHD+23]. **Neuron** [NBT22]. **Neutral** [LHD+22]. **Neutron** [BFC+23, CG23, SLK+21, SML+22, WW19, WWB23, FKS22]. **neutron-induced** [FKS22]. **News** [Gen24, Gre20]. **Next** [CSO+23, GD19, Ben23]. **Next-generation** [CSO+23, Ben23]. **Nile** [DEC+18]. **nm** [BRH+19, CSZ+20, CCA+18a, KCZ+17, LCG+23, MSFK21, NWP+23, PCO+23,

RZAH+19b, SAW+20, SWW+22, UD18, UD20, WBH+18, WBH+19, WSK+20, WCL23, ZB19, ZLP+16, ZCNA17]. **NN** [BPF+22, GRC+19]. **NoC** [EEI+18, KG17, KEAS+18, NRA+22, PKC+20]. **NoC-Based** [EEI+18, KEAS+18]. **NoC-MPSoC** [NRA+22]. **Node** [CPG+23, RRC+20]. **Nodes** [GTC+21a, GTC+21b, SRD+21]. **NOEL** [And20, SAF+23, dOK23]. **NOEL-V** [And20, SAF+23, dOK23]. **Non** [DDM+20, KGHRM23, MTT21]. **Non-Binary** [KGHRM23]. **Non-Blocking** [DDM+20]. **Non-Volatile** [MTT21]. **Nonvolatile** [SNH22, ZUSK23]. **Novel** [DDM+20]. **NTT** [KZH22, PS22a]. **NTT-Based** [KZH22]. **Number** [JZWL23, KA20, KRR22, MSSS23, NDZ+21, RKRF21]. **Numerics** [BDdD19a]. **NVDLA** [FHY19, FWZL19]. **NVIDIA** [FHY19]. **NvMISC** [ZUSK23]. **nW** [TBK+19, TLB+22].

O [MRGRCR+21b]. **Obfuscation** [WZW+19]. **object** [ZZW+19]. **objective** [HH23]. **obtained** [BCM+21]. **off** [GG18, MTJ+22]. **Offs** [RRC+20, ZHLR22]. **On-Board** [CDF+20, RKH+23, ZSM21]. **On-Chip** [DCM23, GPV+22, GTP+22, OBB+24, RZAH+19a, WSK+20]. **On-line** [RCS+19]. **On-Sensor** [SED+23]. **Onboard** [CGG21, DBP21]. **One** [KG22c]. **Online** [GKB+22, SJER23]. **Oolong** [MB16]. **Open** [ABC+20, APHD21b, Ano23c, Ben23, BPF+22, BCZ21a, CTN18, CKP19, CSO+23, DXT+18, EMMB19, FTRH20, Gen24, GCCR21, HCW23, HLHK19, HHB+19, ILG19, JHL+21, LNA21, MMD+22b, MMD+22c, MFM+19, NNPG23, PW17a, PFD21, PCW+22, PCO+23, PGW+20, SAF+23, SSR+18, VOK+22, WW21, WSG+21, ZWB19, DAK+21, GYW+23, Pat18, SCL+21, TZPL21, TSABTM20]. **Open-Source** [ABC+20, Ano23c, CKP19, DXT+18, FTRH20, Gen24, HLHK19, HHB+19, LNA21, MMD+22b, MMD+22c, PCO+23, PGW+20, SSR+18, WSG+21, VOK+22, DAK+21, GYW+23, SCL+21, TZPL21]. **OpenASIP** [HMJ22]. **OpenCL** [ETR+20]. **OpenCV** [KSAL21]. **openKylin** [WLY+22]. **OpenLane** [HSEKD21]. **Operable** [TLB+22]. **Operating** [BKS22, GPL22, MSDM23, WSMRM20]. **Operation** [CCA+18b, WCL23]. **operations** [CRRS21]. **Opportunities** [LVPSB+23]. **Optical** [KMB22, PAPJ+23]. **Optimal** [OCC+17]. **Optimisation** [HH23, WWW23]. **optimised** [PJL21]. **Optimization** [BSSW21, BB21, HWJ23, Liu21, Zha22, GMFC23]. **Optimizations** [KCGL23, VOK+22, CLC+20]. **Optimized** [CPLS23, DPP22, KS22, KKE+22, PSS23, PSM23, SLBJ23, CSM22, HUL+22, KK21, MFM+19]. **Optimizing** [LVR+20, TTB22]. **Optimum** [RSA+23, KSAL21]. **Order** [Ano23a, Ant22, CPWG23, CXL+20a, CCA+18a, CCA+18b, DDM+20, GZ22, LHD+21, MFM+19, SGP+23, SSB22, SPDLP+22, ZTC21, PRS+15, RPD+15]. **organisation** [SC17]. **Organization** [LF22, OCC+17]. **Oriented** [GVT+22, KGBH22]. **Original** [GTD+23]. **Orthogonal** [WZW+19]. **OSEK** [DL17]. **OSEK-V** [DL17]. **OTA** [SCL+21]. **Out-of-Order** [Ano23a, Ant22, CPWG23, CXL+20a, CCA+18a, CCA+18b, DDM+20, GZ22, LHD+21, MFM+19, SGP+23, SSB22, ZTC21, RPD+15]. **Overhead** [SR22]. **Overlay** [BCCM21]. **Overlays** [VROdlT22]. **Overview** [APHD21a, HHB+19]. **Own** [Szk21].

P [CLC+20]. **P870** [Ano23d]. **Pacemaker** [YNYD23]. **Packed** [LYL23, YCL+23]. **Packed-SIMD** [LYL23]. **Packet** [PLSK20, DKC+21, WWZL17]. **Parallel** [GRC+19, Gra16, MAS18, MGZ+23, NRB+23, OBB+24, ZHL+23, HC20].

Parallel-Execution-Unit [MAS18]. **Parallelization** [BZVCB23]. **Parallelizing** [KMB22]. **Partial** [CMV21, CKTG21, WW21]. **Partitioning** [RHS+22]. **pass** [AFP+17]. **Password** [XZW+22]. **patches** [HUL+22]. **Path** [RKRF21]. **Paths** [KRR22]. **Pattern** [TT22]. **Patterns** [MTT21]. **Paving** [BFP+22]. **Payment** [ZSM20]. **PCI** [Lu22]. **PCI-E** [Lu22]. **PCIe** [CRMR+23]. **PCs** [LF22]. **Penetration** [CXLL22]. **Perception** [MST+23]. **Perceptron** [KYDÖ21]. **PERCIVAL** [MMD+22b, MMD+22c]. **Perf** [SNOT21]. **Performance** [AS22, Ano23c, Ano23d, BFP+22, Bis21, BP21, CXL+20a, CTSG22, DDM+20, DRN+23, FHL+22, HGD20b, JBK23, LYZH20, LRB18, MAS18, MZZG22, MPU+23, MÇB22, PAPJ+23, QCL+23, SJR+23, SSS+22, SSB22, SMB17, SNOT20, SNOT21, TZS+21, TLB+22, UD18, VMO+22, VMO+23, WLW+21, XYT+22, XYT+23, YXH20, YLT22, ZB19, ZGMD22, ZGD22, ZCH+23, ZXXH22, CSM22, DKC+21, HK20, JS23, KHH22, MS17, TLS22, WWL+20, ZCH22]. **PERI** [TGRK19, TGRK21]. **Periodical** [DWG+20]. **Periodical-Driven** [DWG+20]. **peripheral** [EHN23]. **peRISCVcope** [GVT+22]. **Perspective** [CDP+22, SMP22, AAC+23]. **Petaflop** [SB23]. **Phalanx** [Gra16]. **Photon** [SG23]. **Photovoltaic** [TLB+22]. **Physical** [APHD21b, GKB+22, HYML23, LHK23, MST+23, NWP+23, NAL22, WSUM19]. **Physical-Aware** [LHK23]. **PIC** [SG23]. **PicoRio** [TZPL21]. **PicoRV32** [JBK23]. **Pipeline** [CXL+20a, EGBS22, OCC+17, ZZZ21, GMV20, MG22, YTL+23]. **Pipelined** [DPP22, PMKZ22, PNV22, QCL+23, TGT+23]. **pipelining** [CSM22]. **PIPO** [KS22]. **pJ** [UD18]. **pJ/Cycle** [UD18]. **Plate** [LRF+21]. **Platform** [AKMS20, APHD21b, Ben23, BWP22, BHT+21, CSO+23, EMMB19, GGH+22, IFO+18, JHL+21, KG22c, LCYK20, LCF23, gMCP19, NGS20, OBSB23, QYZ21, SAB22, WTZ+20, WYK21, WWN23, WMA+21, WMR+22, ZHLR22, ZUSK23, DGA+17, FKS22]. **Platforms** [Ano21, MSP23, CIPR21]. **PLL** [RZAH+19b, RZAH+19a]. **Plug** [OBSB23]. **Plug-In** [OBSB23]. **Pluggable** [MC22]. **Pluggy** [MKM20]. **Point** [AVS+22, Ano20, BPM+21, CSZ+20, CPLS23, MSZB19, PSS23, PCO+23, SEG20, ZSB21, ZZQ21, Liu21, PRS+15, YCL+23, YWZL22, ZSB20, BDdD19b]. **Pointers** [GM21]. **Points** [JZWL23]. **Poisoning** [AVS+22]. **PolarFire** [DXYZ19]. **Policy** [HWJ23, SSS+22]. **Polynomial** [KZH22, WMGD23]. **Portable** [BCZ21a, LYL23, WHB+22]. **Porting** [GPL22, Zha22]. **Posit** [CLR+21b, CLR+21a, CRRS22, KK23, MSSS23, MMD+22a, MMD+22b, MMD+22c, SJM+20, TGRK19, TGRK21, CRRS21]. **Post** [EKAK22, FSMG+19, FSS20, GJC23, HBSE22, KSFS24, KGHRM23, LKKK22, NDZ+21, PGTD23, PGZMG21, RFS20, TH22, XHY+20, ZKS+23, MRGRCR+21a]. **Post-Layout** [PGTD23]. **Post-Quantum** [EKAK22, FSMG+19, FSS20, GJC23, HBSE22, KSFS24, KGHRM23, LKKK22, PGZMG21, RFS20, XHY+20, ZKS+23]. **Post-Silicon** [TH22, MRGRCR+21a]. **Potential** [LMP23]. **Power** [ABP22, BP21, DHL+21, GRC+19, GZK+21, KM21, KCZ+17, KSRT23, KMB22, LRF+21, LHT+21, MRAM+23, MDR19, OBB+24, PCL+23, PHC+23, PPYB23, SED+23, SRD+21, SAW+20, SSD+21, SLCK21, SKK+22, TBR+22, TDH+23, WSK+20, YLT22, ZBZ+23, DKC+21, ERGK21, GBP21, SCR+17, VTS+23, WTY+23, ZWL+20]. **Powered** [TLB+22, AAC+23]. **PPMU** [CTSG22]. **Practical** [MKVD23, VOK+22]. **Precision** [AWB+23, BPF+22, BDdD19a,

CRP+23, LCN+23, NRB+23, OGT+20, PCO+23, RSR21, YCL+23, BDdD19b, HSL+23, LWA+14, ZWL+20]. **Precision-Scalable** [CRP+23]. **Predictability** [GCCR21]. **Predictable** [GCR+23]. **Prediction** [BWP22, SLCK21]. **Predictor** [CSM22]. **PRESENT** [TGMD21]. **Preventing** [ARH+22]. **Prevention** [WSG+21]. **PRINCE** [MCL22]. **Principle** [KG22c]. **Printer** [YLT+23]. **Privilege** [TZG+23]. **Privileged** [WAH21]. **Proceedings** [GD19, IEE21, IEE22]. **Process** [HMTL21]. **Processing** [AvAG21, ABP22, CCC+19, CGG21, CRRS22, GAO21, HWG22, MSSS23, RMF22, SG23, SED+23, Su21, ZB19, ZZB+20, DKC+21, KHH22, WWZL17]. **Processor** [ABM+23, Ano23a, Ano23c, Ano23d, Ano23g, ABW+20, ABW+21, ADF+23, BBV+23, BZVCB23, BBVB20, BHD23, CCC+22, CDF+20, CSZ+20, CV22, CXL+20a, CLWL21, CKTK22, CKTK23, CPLS23, CCA+18a, CCA+18b, Cho18, Cho19, DAPS21, DDM+20, DPP22, DKT+23, DCC+23, DFA+23, FDS+23, GM21, GZ22, GDR+22, GJC23, GSDB18, HHB23, HCW23, HGJD20, HHB+19, HCZ21, IFO+18, IK21b, JK20, KIS20, KFK+19, KCZ+17, KKOY19, KYDÖ21, KKEG22, KK23, LCCS21, LBDPP19, LHD+21, LHC19, LHT+21, LNA21, LZH20, LLL+21, MLPH23, MSZB19, MMGC20, MFM+19, MAS18, MZZG22, MKB+23, gMCP19, NHML+22, NBT22, OCMP19, OCC+17, OGT+20, PSS23, PCL+23, PHC+23, PNSD20, PPS+19, PH18, PCW+22, PCO+23, PSZMM21, PMBA19, PNV22, QCL+23, RKH+23, RHGD21, RZAH+19b, RZAH+19a, RCS+19, SGP+23, SUM23, SLZ+20, SWW+22, SSD+21, SR22, SFGB20, SPDLP+22, SLB+22, SLCK21, TS20]. **Processor** [TBSH22, TT22, TGT+23, TCH23, VROdlT22, WDM22, WTS21, WMGD23, WW19, WSK+20, XHY+20, ZLC19, ZTC21, ZWB19, ZGL+21, ZGD22, ZGG23, ZXXH22, ZCH22, ZLP+16, ZCNA17, ZC23, dOTB+20, dOK23, AvAG21, AFP+17, BGVB18, CMV21, CSM22, DUM+19, DPV+17, DZZZ23, DAK+21, EHN23, FvHC+23, GAE+23, GMV20, GYW+23, HK20, HYXW22, KK21, KHH22, KMS22, LHD+22, LWA+14, LZW+15, LPB+21, LSB22, MS17, MB16, MMR+17, RPD+15, RPSD16, SJYZ22, YWZL22, ZLP+15, ZCNA16]. **processor-based** [YWZL22]. **processor-micro-architecture** [RPSD16]. **Processors** [AAB+23, BWZ+21, BHT+21, CAL23, CRRS22, DEA+21, DtEt22, DMR+20, FdRES23, FSMG+19, GTC+20, GMK+23, HLHK19, HMJ22, HDT+20, KG22a, KS22, KKE+22, LPZ19, MSP23, MTCL21, MSJ19, OPY+18, OBB+24, PPYB23, RSR21, RTRM19, RMP+19, RMR21, SAW+20, SUAR23, Szk21, WSUM19, WW21, WWB23, XYT+22, XYT+23, YYP+22, ZGMD22, ZCH+23, Bar20, KKC+16, NKTS23]. **Product** [CXL+20a, KBBA17]. **Prof5** [SCA+22]. **profiler** [SCA+22]. **Program** [CKK+18]. **Programmable** [Ant22, CTSG22, DEC+18, EAI19, HCL+21, Lu22, PLH+22, SAW+20, TSS+22]. **Programming** [BBV+23, KGBH22, WDM22, WWN23]. **Programs** [WY23, ZPRD23]. **Progress** [HWG22, Liu21]. **Project** [AAC+23]. **Projects** [RBK18]. **Propagated** [LHT+21]. **Properties** [CAL23]. **Proposal** [KKOY19]. **Prospects** [RHS+22]. **protected** [SGCGCR17]. **Protecting** [AHV+21, DGH19, HVW+21, WSUM19]. **Protection** [Bis21, DBGJ20, DCEJ21, GKB+22, HYML23, NAL22, RTRM19, RSM+23, TGMD21]. **Protocol** [DCM23]. **Proton** [dOK23]. **Prototype** [FHD22, HGLD18, ZWL+23, DPV+17].

Prototypes [HGLD19, HGTD20, HGD20b]. **Pruned** [MKB+23]. **Public** [MLD+23]. **Public-Key** [MLD+23]. **PUF** [MSFK21]. **PULP** [GRC+19]. **PULP-NN** [GRC+19]. **Pump** [YBR+23]. **purpose** [MRGRCR+21b, TZ22]. **PUSCH** [BZVCB23]. **PVT** [TLS22]. **PWM** [PSM23]. **PYNQ** [SSD+22]. **Pytorch** [KSAL21].

Q [Raj21]. **QEMU** [AKMS20, Hor21a]. **Quad** [SR22]. **Quad-Core** [SR22]. **Qualification** [FAPHD23]. **Quality** [LPZ19, SMOM19]. **Quantitative** [ZZZ+23]. **Quantized** [ADF+23, DFA+23, GRC+19, GTC+20, GTC+21a, GTC+21b, NRB+23]. **Quantum** [EKAK22, FSMG+19, FSS20, GJC23, HBSE22, KSFS24, KGHRM23, LKKK22, NDZ+21, PGZMG21, RFS20, XHY+20, ZKS+23]. **Quark** [ADF+23, NWP+23]. **Quire** [MMD+22a, MMD+22b, MMD+22c].

race [SCR+17]. **Radiation** [BFC+23, CG23, SLK+21, WW19, WWB23, dOTB+20]. **Radio** [AHB20, PACB21]. **Radix** [HSE+24]. **Radix-4** [HSE+24]. **RAE** [WWL+20]. **RAM** [DXYZ19]. **Random** [APHD21a, DHL+21, TTB22, TTDD21, LSB22]. **Randomization** [ZZL+22]. **Randomized** [JRW+23]. **Range** [UD18]. **RANTT** [KA20]. **Rapid** [GGH+22, LPZ19]. **RAS** [ZZZ+23]. **Rate** [ZHL+23]. **Rates** [YLC21]. **Raven** [LZW+15]. **Razor** [VKG22]. **Reader** [PW17a]. **Ready** [PS22a, ZB19, CDP+22]. **Real** [APSH+22, BB21, HSWM23, HCL+21, KFGH+23, LHD+21, LHC+21, LCF23, MSDM23, PLH+22, WBH+18, WBH+19, ZHX+22]. **Real-Time** [HSWM23, KFGH+23, LHD+21, LHC+21, MSDM23, PLH+22, WBH+18, WBH+19, ZHX+22, APSH+22, BB21, HCL+21, LCF23]. **REALISE** [MLD+23]. **REALISE-IoT** [MLD+23]. **Reality** [SED+23]. **Realization** [NAL22]. **Reason** [TDPD+21]. **Recognition** [GXLW22, LRF+21, ZWL+20, DZZZ23]. **Recommendation** [DEA+21, DtEt22]. **Reconfigurable** [DAHK20, LYZH20, gMCP19, SR22, Suv21b, VROdlT22, WLI23, ZLC19, SAB22, WRD+17]. **Reconfiguration** [ABM+23, CMV21, CKTG21, WW21]. **Recovering** [MTAL22]. **Recovery** [DBP21, XZW+22]. **Recurrence** [HSE+24]. **RedMulE** [TBR+22]. **Reduced** [Pat17]. **Reducing** [MTT21]. **Reduction** [ZCNA17, ZCNA16]. **Redundancy** [ZCNA17, ZCNA16]. **Redundant** [KRR22, RKRF21]. **Reference** [MMA+18]. **Register** [AKMS21]. **Registers** [LBDPP19, MTT21, SZHB21]. **Regression** [ZGD22]. **Regulator** [WCL23]. **Reliability** [AAA+21, AMRCP21, ISM+23, LNZ+22, RAPK23, WSMRM20]. **Reliable** [FSMG+19, MMA+18]. **Remote** [SMJ21, WWL+20]. **Rendering** [TSS+22, ZJX20]. **Replacement** [SSS+22]. **Replication** [DAPS21]. **Reprogrammable** [ZCNA16, ZCNA17]. **Research** [CXLL22, GZ22, GGH+22, HCW23, LPL22, TEYK21, WDM22]. **resilience** [BMM+20]. **Resiliency** [CCA+18a]. **Resilient** [CCA+18b, DBP21, NRLH22, WCL23]. **Resisted** [DHL+21]. **Resolution** [WBH+18, WBH+19]. **Resource** [AHB20, ET21, dAGM23, IK21b, JBK23, PACB21, SCL+21, ZCH22]. **Resource-Constrained** [ET21, dAGM23, JBK23]. **Retargeting** [COMP19]. **Retirement** [KKEG22]. **Return** [KGBH22]. **Return-Oriented** [KGBH22]. **Reuse** [ZHL+23]. **Review** [WCGL23, SFAAL22]. **revolutionary** [GG18]. **revolutionize** [Gre20]. **RF** [KKH+20]. **RFID** [IFO+18]. **Rich** [SNOT21]. **RIMI** [KLP+20]. **RISC** [And20, Ano23b, BDdD19b, BFC+23,

CKTG21, Cho19, EHK20, KFGH+23, MTAL22, RZAH+19b, TLB+22, WY23, dOK23, ABC+20, AAA+21, ASE+21, AKMS20, AKMS21, AS22, APHD21a, APHD21b, APSH+22, AEAS21, AvAG21, AS18, AAC+23, AFP+17, ABP22, AAB+23, AHB20, ABM+23, ARH+22, Ano20, Ano22, Ano23a, Ano23c, Ano23d, Ano23f, Ano23g, Ant22, AMRCP21, AMG+20, AP14, ABW+20, ABW+21, AWB+23, ADF+23, ASH19, AHV+21, AYA+23, BKS22, BBV+23, BSSW21, BSZ+21, BWZ+21, BSZ+24, BHR+18, BRH+19, BB21, BMM+20, BCM+21, BJN23, Bar20, BFP+22, BCCM21, Ben23, BPM+21, BPF+22, BZVCB23, BBVB20, BP21, BPS+23, BWP22, BCZ21a, BCZ21b, BF23, BR24, BHGD21, BHD23, BHT+21, BGVB18, CCC+22, CIPR21, CTN18, CXLL22, CCC+19, CGG21, CG23, CDF+20, CDP+22, CRMR+23, CMV21, CSZ+20, CV22, CPWG23, CLC+20]. **RISC** [CXL+20a, CXL+20b, CWD+21, CLWL21, CKTK22, CYJ+22, CKTK23, CPLS23, CWS+23, CWS+24, CCA+18a, CCA+18b, Cho18, CSM22, CAL23, CKK+18, CKP19, COMP19, Cil21, CRRS21, CRRS22, CPG+23, CRP+23, CTSG22, CLW23, CSO+23, DAHK20, DHL+21, DNN23, DUM+19, DBP21, DXT+18, DBGJ19, DBGJ20, DG22, DGH19, DAPS21, DCM23, DCEJ21, DYZ+22, DPV+17, DDM+20, DPP22, DKC+21, DKT+23, DZZZ23, DEA+21, DtEt22, DCC+23, DRN+23, DXYZ19, DK23, DAK+21, DKA+22, DLMP21, DCL23, DFA+23, DRC+16, DGA+17, DWG+20, DMR+20, EAI19, EAM+22, EMMB19, EAMK21, EKAK22, EEI+18, ELG20, ETR+20, ET21, EHN23, EGBS22, FSPB21, FDS+23, FHY19, FFW20, FWZL19, FHL+22, FdRES23, FKS22, FTRH20, FGD+19, FRC+18, FvHC+23, FSMU21, FSMG+19, FSS20, FHD22, FAPHD23, FDMM22, GM21, GZ22, GZC22, GCL+23, GMS+23, GRCRCG+20, GRC+19, GTC+20, GTC+21a, GTC+21b]. **RISC** [GPV+22, GTP+22, GGH+22, GBP21, GST+17, GDR+22, GXLW22, GAMG+23, Gen24, GWZS23, GKB+22, dAGM23, GMK+23, GAO21, GG18, GAE+23, GMV20, GMFC23, GGÁARG+21, GZK+21, GPL22, GRD22, GLS21, GTD+23, GVT+22, Gra16, GTCS21, Gre20, GCCR21, GCR+23, GYW+23, GJC23, GSDB18, HYML23, HBSE22, HYWP+19, HWJ23, HJ23, HSR+23, HHB23, HH21, HVW+21, HCP+21, HH22, HK20, HYXW22, HSL+23, HSWM23, HCW23, HLHK19, HMJ22, HMJ23, HMJ24, HGLD18, HGLD19, HGD+19, HGTD20, HGD20a, HGJD20, HGD20b, HGD20c, HTGD21, HSEKD21, HMTL21, HDT+20, HHB+19, HUL+22, HCZ21, HWG22, HH23, HCL+21, HM21, IK21a, IVZV20, ISM+23, ILG19, IFO+18, IK21b, IZG22, JBK23, JSB20, JHL+21, JZWL23, JHLD21, JRD+23, JHQ23, JRW+23, JK20, JS23, KSAL21, KIS20, KIS22, KAR+19, KHG20, KG22a, KG22b, KK21, KFK+19, KM21, KA20, KFS22, KSFS24]. **RISC** [KSSMRB23, KNK+21, KCZ+17, KEAS+18, KKH+20, KLP+20, KS22, KKOY19, KG22c, KRR22, KYDÖ21, KHH22, KAMS19, KGBH22, KHS+23, KMS22, KSRT23, KCGL23, KZH22, KMB22, KKEG22, KCHYM19, KFGH+23, KGHRM23, KK23, KKE+22, LCCS21, LRF+21, LBDPP19, LHD+21, LHD+22, LF22, LWA+14, LZW+15, LWC+16, LCYK20, LPB+21, LHC+21, LKKK22, LCN+23, LKHK23, LYZH20, LWC18, LSB22, LGB17, LHC19, LWD20, LHT+21, LCG+23, LCF23, LMP23, LYL23, LWLA23, LXC23, LVR+20, LNA21, LPZ19, Liu21, LPL22, LHK23, LNZ+22, LLS22, LVPSB+23, LZH20, LLL+21, Lu21b, Lu21a, Lu22, LNB+23, LRB18, MCL+21, MCL22, MLPH23, MSZB19, MKČ23, MKM20, MC22, MSSS23, MMD+22a, MMD+22b, MMD+22c, MSP23, MMGC20, MTCL21, MLD+23,

MG22, MR22, MPP21, MFM+19, MTT21, MS17, MAS18, MSJ19, MB16, MST+23, MZZG22, MMR+17, MSR+21, MSD+22, MSDM23, uhMSI19, MKB+23, MPU+23, MKVD23, MGZ+23, MRSBGR+20]. **RISC** [MRGRCR+21a, MRGRCR+21b, MRAM+23, gMCP19, MDR19, MTJ+22, MRB+23, MSFK21, MÇB22, MMA+18, NRB+23, NRA+22, NNPG23, NDZ+21, NWP+23, NAL22, NHML+22, NKH+21, NBT22, NGS20, NKTS23, NPA+23, NSM+23, NRLH22, OPY+18, OCMP19, OCC+17, OGT+20, OBSB23, OBB+24, PSS23, PDLC18, PS22a, PLH+22, PKN+20, PKL21, PJL21, PKC+20, PKKK22, PCL+23, PHC+23, PAPJ+23, PGTD23, PRS+15, PNSD20, PW17a, Pat18, PACB21, PPS+19, PH18, PFD21, PCW+22, PCO+23, PGW+20, PMKZ22, PPYB23, PRP+23, PGZMG21, POMD22, PLSK20, PSZMM21, PNG20, PS22b, PSM23, PMBA19, PNV22, QCL+23, QLH21, QYZ21, QLC20, RSR21, RRJ+21, RSR20, RHS+22, RKH+23, RAPK23, RRC+20, RPD+15, RPSD16, RSA+23, RMF22, RKRF21, RBK18, RLL+21, RSS+21, RHGD21, RMP+19, RK23, RMR21, RSM+23, RPA22, RZAH+19a, RFS20, RCS+19, RHD+23]. **RISC** [SGP+23, SEM19, SMP22, SVM+23, SNM22, SG23, SJR+23, SUM23, SNH22, SGCGCR17, SSS+22, SFAAL22, SLZ+20, SLK+21, SML+22, SMMD23, SSB22, SAF+23, SC17, SLBJ23, SBJ21, SMB17, SAB22, SED+23, SCR+17, SSR+18, SRD+21, SAW+20, SWW+21, SWW+22, SZHB21, SJER23, SSD+21, Sew21, SMGS22, SJM+20, SMJ21, SS19, SWWL23, SR22, SUAR23, SSB+19, SCA+22, SFGB20, SB23, SJYZ22, SCM+21, SPDLP+22, SLB+22, SCL+21, SS22, SJBS21, SMOM19, Su20, Su21, SNK22, SLCK21, Suv21a, Suv21b, SNOT20, SNOT21, SLMS21, SKK+22, SSD+22, Szk21, TTB22, TS20, TMR+19, TBSH22, TLS22, TT22, TBS+21, TZPL21, TH22, TZS+21, TZ22, TZG+23, TGMD20, TGMD21, TBLD23, TDPD+21, TEYK21, TYEK21, TSS+22, TGRK19, TGRK21, TGT+23, TAC+22, TSABTM20, TBR+22, TCL+21, TTDD21, TDH+23, TBK+19, TL22, TCH23, TOYK22, TA22]. **RISC** [USQ+22, UD18, UD20, VTS+23, VKG22, VROdlT22, VMO+22, VMO+23, VSD22, VMFL23, WSMRM20, WRD+17, WWZL17, WBH+18, WT19, WZW+19, WBH+19, WTZ+20, WZW+21, WLW+21, WLY+22, WDM22, WWGW23, WWW23, WLI23, WTS21, WLA+13, WA21, WAH21, WYK21, WCGL23, WMGD23, WSUM19, WMA+21, WMR+22, WW19, WW21, WWB23, WSG+21, WSK+20, WXY+22, WHB+22, WLC22, WTY+23, WCL23, WGZ+23, XZW+22, XLZ23, XHY+20, XYT+22, XYT+23, YBR+23, YNYD23, Yan20, YLC21, YCL+23, YLT+23, YTL+23, YYM21, YTÖ21, YXH20, YLT22, YWZL22, YYP+22, ZLC19, ZB19, ZSB20, ZSB21, Zee22, ZTC21, ZPRD21, ZPRD22, ZPRD23, ZBZ+23, ZHC+18, ZZW+19, ZWL+20, ZGL+21, ZZG21, ZZZ21, ZGMD22, ZGD22, Zha22, ZHX+22, ZHLR22, ZGG23, ZZZ+23, ZCH+23, ZXXH22, ZKS+23, ZUSK23, ZZQ21, ZCH22, ZWL+23, ZSM20, ZSM21, ZS23, ZJX20, ZHL+23, ZBA+20, ZLP+15, ZCNA16, ZLP+16, ZCNA17, ZPL+23]. **RISC** [ZNF21, ZZL+22, ZC23, dOTB+20]. **RISC-HD** [TBSH22]. **RISC-V** [And20, Ano23b, BDdD19b, BFC+23, CKTG21, Cho19, KFGH+23, MTAL22, TLB+22, WY23, dOK23, ABC+20, AAA+21, ASE+21, AKMS20, AKMS21, AS22, APHD21a, APHD21b, APSH+22, AEAS21, AvAG21, AS18, AAC+23, AFP+17, ABP22, AAB+23, AHB20, ABM+23, ARH+22, Ano20, Ano22, Ano23a, Ano23c, Ano23d, Ano23f, Ano23g, Ant22, AMRCP21, AMG+20, AP14, ABW+20, ABW+21, AWB+23, ADF+23, ASH19, AHV+21, AYA+23, BKS22, BBV+23, BSSW21,

BSZ+21, BWZ+21, BSZ+24, BHR+18, BRH+19, BB21, BMM+20, BCM+21, BJN23, Bar20, BFP+22, Ben23, BPM+21, BPF+22, BZVCB23, BBVB20, BP21, BWP22, BCZ21a, BCZ21b, BF23, BR24, BHGD21, BHD23, BHT+21, BGVB18, CCC+22, CIPR21, CTN18, CXLL22, CCC+19, CGG21, CG23, CDF+20, CDP+22, CRMR+23, CMV21, CSZ+20, CV22, CPWG23, CLC+20, CXL+20a, CXL+20b, CWD+21, CLWL21]. **RISC-V** [CKTK22, CYJ+22, CKTK23, CPLS23, CWS+23, CWS+24, CCA+18a, CCA+18b, Cho18, CSM22, CAL23, CKK+18, CKP19, COMP19, Cil21, CRRS21, CRRS22, CPG+23, CRP+23, CTSG22, CLW23, CSO+23, DAHK20, DHL+21, DNN23, DUM+19, DBP21, DXT+18, DBGJ19, DBGJ20, DG22, DGH19, DAPS21, DCM23, DCEJ21, DYZ+22, DPV+17, DDM+20, DPP22, DKC+21, DKT+23, DZZZ23, DEA+21, DtEt22, DCC+23, DRN+23, DXYZ19, DK23, DAK+21, DKA+22, DLMP21, DCL23, DFA+23, DRC+16, DGA+17, DWG+20, DMR+20, EAI19, EAM+22, EMMB19, EAMK21, EKAK22, EEI+18, ELG20, ETR+20, ET21, EHN23, EGBS22, FSPB21, FDS+23, FHY19, FFW20, FWZL19, FHL+22, FdRES23, FKS22, FTRH20, FGD+19, FRC+18, FvHC+23, FSMU21, FSMG+19, FSS20, FHD22, FAPHD23, FDMM22, GM21, GZ22, GZC22, GCL+23, GMS+23, GRCRCG+20, GRC+19, GTC+20, GTC+21a, GTC+21b, GPV+22, GTP+22, GST+17, GDR+22]. **RISC-V** [GXLW22, GAMG+23, Gen24, GWZS23, GKB+22, dAGM23, GMK+23, GAO21, GG18, GAE+23, GMV20, GMFC23, GZK+21, GPL22, GRD22, GLS21, GTD+23, GVT+22, Gra16, GTCS21, Gre20, GCCR21, GCR+23, GYW+23, GJC23, GSDB18, HYML23, HBSE22, HYWP+19, HWJ23, HSR+23, HHB23, HH21, HVW+21, HCP+21, HH22, HK20, HYXW22, HSWM23, HCW23, HLHK19, HMJ22, HMJ23, HMJ24, HGLD18, HGLD19, HGD+19, HGTD20, HGD20a, HGJD20, HGD20b, HGD20c, HTGD21, HSEKD21, HMTL21, HDT+20, HHB+19, Hor20, HCZ21, HWG22, HH23, HCL+21, HM21, IK21a, IVZV20, ISM+23, ILG19, IFO+18, IK21b, IZG22, JBK23, JSB20, JHL+21, JZWL23, JHLD21, JRD+23, JHQ23, JRW+23, JK20, JS23, KSAL21, KIS20, KIS22, KAR+19, KHG20, KG22a, KG22b, KK21, KFK+19, KM21, KA20, KFS22, KSFS24, KNK+21, KCZ+17, KEAS+18, KKH+20, KLP+20, KS22, KKOY19, KG22c, KRR22]. **RISC-V** [KYDÖ21, KHH22, KAMS19, KGBH22, KHS+23, KMS22, KSRT23, KCGL23, KZH22, KMB22, KKEG22, KCHYM19, KFGH+23, KGHRM23, KK23, KKE+22, LCCS21, LRF+21, LBDPP19, LHD+21, LHD+22, LF22, LWA+14, LZW+15, LWC+16, LCYK20, LPB+21, LHC+21, LKKK22, LCN+23, LKHK23, LYZH20, LWC18, LSB22, LGB17, LHC19, LWD20, LHT+21, LCG+23, LCF23, LMP23, LYL23, LWLA23, LXC23, LVR+20, LNA21, LPZ19, Liu21, LPL22, LHK23, LNZ+22, LLS22, LVPSB+23, LZH20, LLL+21, Lu21b, Lu21a, Lu22, LNB+23, LRB18, MCL+21, MCL22, MLPH23, MSZB19, MKČ23, MKM20, MC22, MSSS23, MMD+22a, MMD+22b, MMD+22c, MSP23, MMGC20, MTCL21, MLD+23, MG22, MR22, MPP21, MFM+19, MTT21, MS17, MAS18, MSJ19, MB16, MST+23, MZZG22, MMR+17, MSR+21, MSD+22, MSDM23, uhMSI19, MPU+23, MKVD23, MGZ+23, MRSBGR+20, MRGRCR+21a, MRGRCR+21b, MRAM+23, gMCP19, MDR19, MTJ+22, MRB+23, MSFK21, MÇB22, MMA+18]. **RISC-V** [NRB+23, NRA+22, NNPG23, NDZ+21, NWP+23, NAL22, NHML+22, NKH+21, NBT22, NGS20, NKTS23, NPA+23, NSM+23, NRLH22, OPY+18, OCMP19, OCC+17, OGT+20, OBSB23, OBB+24, PSS23, PDLC18, PS22a, PLH+22, PKN+20,

PKL21, PJL21, PKC+20, PKKK22, PCL+23, PHC+23, PAPJ+23, PGTD23, PNSD20, PW17a, Pat18, PACB21, PPS+19, PH18, PFD21, PCW+22, PGW+20, PMKZ22, PPYB23, PRP+23, PGZMG21, POMD22, PLSK20, PNG20, PS22b, PSM23, PMBA19, PNV22, QCL+23, QLH21, QYZ21, RSR21, RRJ+21, RSR20, RHS+22, RKH+23, RAPK23, RRC+20, RPD+15, RPSD16, RSA+23, RMF22, RKRF21, RBK18, RSS+21, RHGD21, RMP+19, RK23, RSM+23, RPA22, RZAH+19a, RFS20, RCS+19, RHD+23, SGP+23, SEM19, SMP22, SVM+23, SNM22, SG23, SJR+23, SUM23, SNH22, SGCGCR17, SSS+22, SFAAL22, SLZ+20, SLK+21, SML+22, SMMD23, SSB22].

RISC-V [SAF+23, SC17, SLBJ23, SBJ21, SMB17, SAB22, SED+23, SCR+17, SSR+18, SRD+21, SAW+20, SWW+21, SWW+22, SZHB21, SJER23, SSD+21, Sew21, SMGS22, SJM+20, SMJ21, SS19, SWWL23, SR22, SUAR23, SSB+19, SCA+22, SFGB20, SB23, SJYZ22, SCM+21, SPDLP+22, SLB+22, SCL+21, SS22, SJBS21, SMOM19, Su20, Su21, SNK22, SLCK21, Suv21a, SNOT20, SNOT21, SLMS21, SKK+22, SSD+22, Szk21, TTB22, TS20, TMR+19, TBSH22, TLS22, TT22, TBS+21, TZPL21, TH22, TZS+21, TZ22, TZG+23, TGMD20, TGMD21, TBLD23, TDPD+21, TEYK21, TYEK21, TSS+22, TGRK19, TGRK21, TGT+23, TAC+22, TSABTM20, TCL+21, TTDD21, TDH+23, TBK+19, TL22, TCH23, TOYK22, TA22, USQ+22, UD18, UD20, VTS+23, VROdlT22, VMO+22, VMO+23, VSD22, VMFL23, WSMRM20, WRD+17, WWZL17, WBH+18, WT19, WZW+19, WBH+19, WTZ+20, WZW+21, WLW+21].

RISC-V [WLY+22, WDM22, WWGW23, WWW23, WLI23, WTS21, WLA+13, WA21, WAH21, WYK21, WCGL23, WMGD23, WSUM19, WMA+21, WMR+22, WW19, WW21, WWB23, WSG+21, WSK+20, WXY+22, WHB+22, WLC22, WTY+23, WCL23, WGZ+23, XZW+22, XLZ23, XHY+20, XYT+22, XYT+23, YBR+23, YNYD23, Yan20, YLC21, YCL+23, YLT+23, YTL+23, YYM21, YTÖ21, YXH20, YLT22, YWZL22, YYP+22, ZLC19, ZB19, ZSB20, ZSB21, Zee22, ZTC21, ZPRD21, ZPRD22, ZPRD23, ZBZ+23, ZHC+18, ZZW+19, ZWL+20, ZGL+21, ZZG21, ZZZ21, ZGMD22, ZGD22, Zha22, ZHX+22, ZHLR22, ZGG23, ZZZ+23, ZCH+23, ZXXH22, ZKS+23, ZUSK23, ZZQ21, ZCH22, ZWL+23, ZSM20, ZSM21, ZS23, ZJX20, ZHL+23, ZBA+20, ZLP+15, ZCNA16, ZLP+16, ZCNA17, ZPL+23, ZNF21, ZZL+22, ZC23, dOTB+20].

RISC-V-Based [HJ23, MKB+23, PCO+23, QLC20, RMR21, TBR+22, BCCM21, GGH+22, GGÁARG+21, HSL+23, HUL+22, KSSMRB23, RLL+21].

RISC-V/Tensor [DEA+21, DtEt22].

RISC-V3 [RKRF21].

RISC-VTF [JHLD21].

RISCV [ZZB+20, Hor21a].

RISCV-based [ZZB+20].

riscv/QEMU [Hor21a].

Rise [Su20, AYA+23].

RISK [PAPJ+23, FFW20].

Risk-5 [FFW20].

RLWE [ZHC+18].

RNN [AHB20, CDF+20, PACB21].

RNN-based [AHB20, PACB21].

Road [BFP+22].

Roadmap [FDMM22].

Robotics [LCYK20].

Rocket [Ano23e, LBDPP19, LNB+23, SBJ21].

Root [HSE+24].

Roots [Gen24].

ROS [LCYK20].

ROS-Based [LCYK20].

rotation [HC20].

Routed [KG17].

RSA [KSSMRB23].

RSM [TGMD21].

RTOS [DL17].

Running [GDR+22, IVZV20].

Runtime [HGTD20, LWLA23, SAB22, WWN23, WRD+17].

Runtime-reconfigurable [SAB22, WRD+17].

RV [CKTG21].

RV-CAP [CKTG21].

RV32E [Ano20].

RV32I [DPP22, GRCRCG+20].

RV32IMAC [DWG+20].

RV32X [WY23].

RVCoreP [KK21].

RVCoreP-32IC [KK21].

RvDfi [FHL+22].

RVFC [XLZ23].

RVfpga [HCP+21].

RVNet [WWZL17].

RVNoC [EEI+18].

s [RZAH+19b, RZAH+19a]. **Saber** [KZH22, ZHLR22]. **Safe** [gMCP19]. **SafeLS** [SAF+23]. **Safety** [AAB+23, DLMP21, MKČ23, RLL+21, WMA+21, DUM+19]. **Safety-Critical** [MKČ23, RLL+21, WMA+21]. **SAR** [DRC+16]. **Sargantana** [DCC+23, SPDLP+22]. **SAT** [FSPB21]. **SAT-Based** [FSPB21]. **Satellite** [CDF+20]. **SBST** [FSPB21, FDS+23]. **Scalability** [TH22]. **Scalable** [AKMS20, BZVCB23, CSZ+20, CRP+23, GST+17, KKOY19, PNSD20, RSRT19, TBK+19, WWL+20]. **Scalar** [BDdD19b]. **Scale** [DAKK19, TSW+23, Sew21]. **Scale4Edge** [EAM+22]. **Scaled** [gMCP19]. **Scaling** [DHL+21, LCN+23, TLB+22]. **Scheduled** [QLC20]. **Scheduling** [APSH+22, EGBS22]. **Scheme** [FSS20, LWLA23, WLC22]. **schemes** [HK20]. **Scientific** [BDdD19b]. **Script** [ZNF21]. **Script-Based** [ZNF21]. **Scripting** [KKK+17a, KKK+17b, KKK+17c]. **Sealable** [DCEJ21]. **SealPK** [DCEJ21]. **second** [GCL+23]. **Secure** [ASE+21, DBP21, FSMG+19, GJC23, HYWP+19, KCHYM19, PDLC18, PKC+20, SSB+19, SS22, SLMS21, ZLC19, BF23]. **Secure-Boot** [HYWP+19]. **Secures** [Gen24]. **Securing** [DG22, PRP+23]. **Security** [AAA+21, AAB+23, Ano22, ASH19, AHV+21, CDP+22, CYJ+22, CAL23, DCL23, FHL+22, GAMG+23, Gen24, GWZS23, HVW+21, NGS20, OPY+18, RRJ+21, SG23, SKK+22, USQ+22, WGZ+23, ZHX+22, ZC23, Lu21a, MMR+17]. **Security-Critical** [SKK+22]. **SEGGER** [Ano20]. **seL4** [DK23]. **Selection** [HSE+24]. **Self** [TLB+22, ZZZ+23]. **Self-Healing** [ZZZ+23]. **Self-Powered** [TLB+22]. **Semantic** [SZHB21]. **Sensing** [DWG+20, EMMB19, TLB+22]. **Sensor** [CGG21, MGZ+23, SED+23, ZS23]. **September** [IEE22]. **Sequencing** [WHB+22]. **Sequential** [BBV+23, MTT21]. **Sequrity** [WZW+19]. **Server** [ZZZ+23]. **servers** [LF22]. **services** [BF23]. **Set** [CLW23, DMR+20, FSS20, FHD22, GZC22, dAGM23, HMJ22, HMJ23, HMJ24, HCZ21, JZWL23, JHLD21, KG22c, LPZ19, Liu21, MR22, NDZ+21, Pat17, PMKZ22, TBLD23, WA21, WAH21, ZZL+22, EHN23, PKKK22, Pat18, RPSD16, WLA+13, ZJX20]. **Sets** [WZW+19, AP14]. **SEU** [DAPS21]. **SGX** [SNOT20, SNOT21]. **SHA** [LMP23]. **SHA-3** [LMP23]. **SHAKTI** [DUM+19, MMR+17]. **SHAKTI-MS** [DUM+19]. **Shakti-T** [MMR+17]. **Shape** [KIS20]. **Shape-Changeable** [KIS20]. **Shared** [IK21b, PHC+23]. **Sharing** [LVR+20]. **shellcoding** [BJN23]. **shift** [HC20]. **SHORE** [DLMP21]. **Short** [KKC+16]. **Short-circuit** [KKC+16]. **Shortcomings** [RHS+22]. **should** [AP14]. **Side** [Bis21, DGH19, HGD20a, JHQ23, LHD+21, GYW+23]. **Side-Channel** [DGH19, LHD+21, Bis21, GYW+23]. **SiFive** [Ano21]. **sign** [GG18]. **sign-off** [GG18]. **Signal** [ABP22, BHR+18, BRH+19, CCC+19, RMF22]. **Signature** [GJC23, KSSMRB23]. **Signatures** [KSFS24]. **Signoff** [YLT22]. **SIKE** [EAMK21, EKAK22, RFS20]. **Silicon** [ABC+20, CG23, TH22, MRGRCR+21a]. **SIMD** [AvAG21, LYL23, PKL21, PJL21, PW17b, SPDLP+22, TMR+19, YCL+23]. **Simodense** [PJL21]. **Simplify** [BCCM21]. **Simulation** [BWP22, CLWL21, DXYZ19, DMR+20, HGTD20, PFD21, SNK22, MG22]. **Simulator** [BHT+21]. **Simulators** [IZG22, TBLD23]. **Simultaneous** [ZLP+16]. **Simultaneous-Switching** [ZLP+16]. **Singapore** [GD19]. **Single** [BWZ+21, CLWL21, DPV+17, KFK+19, SZHB21]. **Single-Issue** [SZHB21]. **Single-Stage** [KFK+19]. **Siracusa** [SED+23]. **Siwa**

[GRCRCG+20]. **Size** [BSSW21, LCN+23, SLBJ23]. **Size-Optimized** [SLBJ23]. **Skip** [GAMG+23]. **SLM** [GMK+23]. **Slow** [SCR+17]. **SM2** [CPLS23, SWWL23]. **SM2/3** [CPLS23]. **SM4** [KKE+22, WWGW23]. **Small** [BPM+21, BWP22, TZPL21]. **small-board** [TZPL21]. **SmallFloat** [TMR+19]. **Smart** [CYJ+22, EMMB19, FdRES23, LZH20, SLMS21, YBR+23]. **smartphones** [LF22]. **SMURF** [BDdD19b]. **SNOW** [WYK21]. **SNOW-V** [WYK21]. **SoC** [DEA+21, DtEt22, HZS+19, DBP21, TH22, VMO+23, WTY+23, And20, AMG+20, AYA+23, BHR+18, BRH+19, BFC+23, BGVB18, CPG+23, DHL+21, DCM23, DCC+23, FHY19, FWZL19, FRC+18, GCL+23, GXLW22, GAO21, GZK+21, HSWM23, KCZ+17, LCG+23, Lu21b, MCL22, MLPH23, MSFK21, NWP+23, NGS20, QLH21, RAPK23, SED+23, SRD+21, SSD+21, TBS+21, TSABTM20, TDH+23, TLB+22, TL22, VTS+23, VKG22, VMO+22, WBH+18, WBH+19, WTZ+20, XZW+22, ZLC19, ZZQ21, ZWL+23, ZSM20, ZSM21, ZS23]. **SoCs** [BWP22, KFGH+23, PGW+20, TBR+22]. **Soft** [ARH+22, CMV21, CV22, Cho18, Cho19, DAPS21, FvHC+23, GDR+22, GRD22, KKOY19, LNZ+22, MFM+19, MAS18, OCC+17, PMKZ22, PMBA19, RTRM19, SUAR23, WW19, WWB23, WLC22, ZCH22, dOTB+20, BCM+21, KK21, MS17]. **Soft-Core** [KKOY19, PMBA19, FvHC+23, BCM+21]. **Soft-Cores** [GRD22]. **Soft-Processor** [MAS18, CMV21, MS17]. **Soft-Processors** [SUAR23]. **Softcore** [FdRES23, HLHK19, JBK23, PKL21, PJL21]. **softcores** [TLS22]. **Software** [AHV+21, BB21, Bau17, Bis21, BPS+23, CRMR+23, DAPS21, DYZ+22, DXYZ19, DLMP21, HVW+21, HSL+23, LBDPP19, LKHK23, MSD+22, uhMSI19, RFS20, SMGS22, TML+17a, TML+17b, TML+17c, WYK21, ZGMD22, ZGD22, ZWL+23, ZNF21, HP18, MRGRCR+21b, SBJ21, SCM+21, TZPL21, TSABTM20]. **Software-driven** [LKHK23]. **software-emulated** [MRGRCR+21b]. **Software-Hardware** [uhMSI19]. **Software-implemented** [SMGS22]. **software/hardware** [SCM+21]. **SOI** [CSZ+20, KCZ+17, MSZB19, SAW+20, SPDLP+22, WSK+20]. **solution** [CIPR21, KSAL21]. **Solutions** [BWP22]. **SonicBOOM** [LHK23]. **sound** [SGCGCR17]. **sounds** [FvHC+23]. **Source** [ABC+20, APHD21b, Ano21, Ano23c, CTN18, CKP19, DXT+18, FTRH20, Gen24, GCCR21, HCW23, HLHK19, HHB+19, ILG19, LNA21, MMD+22b, MMD+22c, MFM+19, PFD21, PCW+22, PCO+23, PGW+20, SAF+23, SSR+18, WW21, WSG+21, DAK+21, GYW+23, SNM22, SCL+21, TZPL21, VOK+22]. **Space** [And20, BSZ+21, BSZ+24, CDP+22, FDMM22, LHK23, RAPK23, SVM+23, SLZ+20, SMMD23, SLBJ23, WLW+21, WMA+21, WMR+22]. **Space-Grade** [WMA+21, WMR+22]. **SpaceFibre** [Suv21b]. **Spaceflight** [MSP23]. **Sparq** [DFA+23]. **Sparse** [WBH+18, WBH+19]. **SPEC** [SSB22, TZS+21]. **Specific** [GGÁARG+21, HMJ22, OBSB23, WT19, XHY+20, YYP+22, ZXXH22, DL17, HP18, LPB+21, Pat18]. **Specification** [CTSG22, HGD20c, HZS+19]. **Specifications** [LPZ19]. **SpecTerminator** [JHQ23]. **Spectral** [WBH+18, WBH+19]. **Spectre** [LHD+22]. **Spectrophotometer** [SLB+22]. **Speculative** [GRD22, GCCR21, GCR+23, JHQ23, VKG22]. **speech** [DZZZ23]. **Speed** [BSSW21, HBSE22, KZH22, LWD20, NDZ+21, RLL+21, ZNF21]. **Speed-Up** [NDZ+21, ZNF21]. **speedAI240**

[SB23]. **Speeding** [LMP23, MGZ+23]. **Spike** [Hor21b]. **sprung** [Gen24]. **SQRT** [LGB17]. **Square** [HSE+24, TS20, WTS21]. **SRAM** [FvHC+23, RTRM19, SG23, VKG22, WW19, WW21, WWB23, ZHL+23, ZCNA17, dOTB+20]. **SRAM-Based** [RTRM19, WWB23, ZCNA17, dOTB+20, WW19, WW21]. **Stage** [CXL+20a, GZ22, KFK+19, PMKZ22, CSM22, YTL+23, ZZZ21]. **Standard** [LKHK23, BF23]. **standards** [HC20]. **Started** [Hor20]. **Static** [LWLA23, RHS+22]. **steady** [SCR+17]. **Stealthy** [PGTD23]. **Step** [NKTS23]. **Stimulus** [AMG+20]. **Storage** [GCL+23, Lu21b]. **Strategies** [PPYB23]. **Strategy** [HJ23]. **Stream** [SZHB21]. **Structurally** [MKB+23]. **Structurally-Pruned** [MKB+23]. **Structure** [LPL22]. **Structured** [ZCH+23]. **STT** [ZBA+20]. **STT-MRAM** [ZBA+20]. **studies** [GYW+23]. **Study** [APSH+22, BHD23, CPWG23, DCM23, HGLD19, HGJD20, PKC+20, PGTD23, RHGD21, SSB22, SSR+18, WMGD23, YLC21, SCM+21]. **Sub** [ADF+23, DFA+23, UD18]. **Sub-Byte** [ADF+23, DFA+23]. **Submicrosecond** [KCZ+17]. **Suitability** [KRR22]. **Suitable** [SUM23]. **Suite** [CKP19, GYW+23]. **Superscalar** [Ant22, GMV20]. **Superscaler** [DDM+20]. **Support** [BPM+21, CSZ+20, Cil21, KKK+17a, KKK+17b, KKK+17c, KKEG22, MSD+22, PCO+23, WY23]. **Supported** [LCN+23, Ano20]. **Supporting** [DRN+23, MZZG22, KK21]. **Suppression** [TBK+19]. **surveillance** [SGCGCR17]. **Survey** [AAB+23, BR24, CLW23, ET21, IZG22, MSD+22, NGS20, DAK+21, Lu21a]. **Sustainable** [SAB22]. **SVE** [CRRS21]. **SW** [KSSMRB23, MSZB19]. **SweRV** [Ano23f]. **Switched** [ZLP+16, LZW+15, MSFK21, ZLP+15]. **Switched-Capacitor** [ZLP+16, LZW+15, MSFK21, ZLP+15]. **Switching** [HGTD20, ZLP+16]. **SWUpdate** [SCL+21]. **SX** [GMFC23, VMFL23]. **SX-Aurora** [GMFC23, VMFL23]. **Symbolic** [BHD23, TZG+23]. **Symposium** [BBdD17, IEE21, IEE22, TBL19]. **Synchronization** [DAKK19]. **Synthesis** [GRD22, MMGC20, NSM+23]. **Synthesizable** [LCG+23, RZAH+19b]. **Synthesized** [RZAH+19a]. **System** [Ano22, BKS22, BWZ+21, GMS+23, GAO21, GPL22, HWJ23, HWG22, ILG19, JS23, KAR+19, KM21, LRF+21, LHD+21, LCF23, LXC23, LZH20, Lu22, MSSS23, MTCL21, MLD+23, MSDM23, MGZ+23, NBT22, NRLH22, RLL+21, RHD+23, SMB17, SAW+20, TDPD+21, VOK+22, WSMRM20, WTZ+20, WDM22, WGZ+23, YLT+23, YLT22, ZPRD22, ZZB+20, ZSM21, ZBA+20, ZC23, DGA+17, GG18, SJYZ22, WWZL17, ZZW+19, CKTG21, CYJ+22, CRP+23, DNN23, HYWP+19, HZS+19, KSSMRB23, KCHYM19, MSDM23, NKH+21, RSR20, SLK+21, SML+22, SMMD23, ZNF21]. **System-Aware** [SMB17]. **System-Level** [GMS+23]. **system-on-chip** [DGA+17, CKTG21, CYJ+22, CRP+23, DNN23, HYWP+19, HZS+19, KSSMRB23, KCHYM19, MSDM23, NKH+21, RSR20, SLK+21, SML+22, SMMD23, ZNF21]. **Systematic** [HGD+19]. **Systems** [APHD21b, APSH+22, dAGM23, HJ23, JK20, KG22b, KLP+20, KRR22, KSRT23, LNA21, MKČ23, NAL22, RKRF21, RCS+19, SMP22, SLZ+20, SAB22, WMA+21, ZHX+22, SFAAL22, TCL+21].

T [CSM+21, LWD20, MMR+17]. **Table** [AS22]. **TAIGA** [MS17]. **TailoredCore** [GGÁARG+21]. **Target** [KHS+23]. **Targeted** [HCP+21]. **Targeting** [And20, BWZ+21, KSRT23, FTRH20]. **Task** [APSH+22]. **tasking** [BKS22]. **TCP** [TL22].

TCP/IP [TL22]. **Teaching** [GVT+22, ZTC21]. **Teaching-Oriented** [GVT+22]. **Tech** [Szk21]. **Technique** [POMD22]. **Techniques** [CCA+18a, dOK23]. **Technology** [CCC+22, DCC+23, GG18, ZB19]. **TEE** [SNOT20, YXH20]. **Telemetry** [CDF+20]. **Temperature** [TLB+22]. **Tensor** [DEA+21, DtEt22]. **Teraflops/W** [SB23]. **Tesla** [TSW+23]. **Test** [AAA+21, CKK+18, DKT+23, MKM20, TH22, TTDD21]. **Testability** [AAB+23]. **Testing** [AAC+23, BHGD21, CXLL22, HGLD19, HGD20a, HGJD20, HGD20c, HTGD21, JRW+23, RHGD21, RCS+19, SML+22, WW19, WWB23, dOK23, MRGRCR+21a]. **Tests** [BFC+23, TZS+21]. **Textbook** [HH21]. **their** [WSG+21]. **Theoretic** [KA20, NDZ+21]. **Thermal** [OBB+24, VMO+22, VMO+23]. **Things** [DGA+17, SCR+17]. **Thousand** [DEA+21]. **threaded** [OCC+17]. **Threading** [BCM+21]. **Three** [ZZZ21]. **Three-stage** [ZZZ21]. **Threshold** [GST+17, UD20, WCL23]. **Throughput** [DNN23, VKG22]. **Thwarting** [BR24]. **Tiered** [DXT+18]. **Tightly** [CMV21, GKB+22, GTCS21, ZLP+15]. **Tightly-Coupled** [GKB+22, CMV21]. **tightly-integrated** [ZLP+15]. **TIGRA** [GTCS21]. **Tile** [KG22a, KG22b]. **Tile-Based** [KG22a]. **Tiles** [GCL+23]. **Time** [HSWM23, IZG22, KFGH+23, LHD+21, LHC+21, MSDM23, NNPG23, PLH+22, WBH+18, WBH+19, ZHX+22, ZHLR22, APSH+22, BB21, HCL+21, LCF23]. **Time-Memory** [ZHLR22]. **Time-Triggered** [NNPG23]. **Timer** [EHK20]. **Timescales** [KCZ+17]. **Timing** [Bis21, BWP22, GCCR21, GCR+23, LHT+21, NNPG23, UD20, VKG22, WSG+21]. **Timing-Instructions** [NNPG23]. **Tiny** [GVT+22, NBT22, BPM+21]. **Tiny-FPU** [BPM+21]. **Tissue** [AMG+20]. **TL** [MKVD23]. **TL-Verilog** [MKVD23]. **TLB** [PKN+20]. **TMR** [WW21, WWB23]. **Tolerance** [DKA+22, RMP+19, SMGS22, JS23]. **Tolerant** [BCM+21, SLZ+20, SML+22, SMMD23, SR22, SUAR23, VSD22, WW19, dOK23]. **Tool** [AMRCP21, PFD21, RBK18, MG22, SCA+22]. **Toolchain** [TZS+21]. **Tools** [DRN+23, MSJ19]. **Toolset** [HMJ22]. **TOPS** [NRB+23]. **TOPS/W** [NRB+23]. **Torus** [KG17]. **Tournament** [CSM22]. **TPM** [BCZ21b, SJBS21]. **TPU** [Pat18]. **Trace** [HWG22, KGBH22, KKEG22, ZPRD22]. **tracing** [BPS+23]. **Tracking** [PDLC18, SS19, WGZ+23]. **Trade** [MTJ+22, RRC+20, ZHLR22]. **Trade-off** [MTJ+22]. **Trade-Offs** [RRC+20, ZHLR22]. **traffic** [SJYZ22]. **Training** [BPF+22, GPV+22, GTP+22, LCN+23]. **Transactions** [SLMS21]. **Transceivers** [KKH+20]. **Transducers** [FdRES23]. **Transform** [KA20, NDZ+21]. **Transformer** [JHLD21]. **Transformers** [MKB+23]. **Transient** [YLC21]. **transistor** [AFP+17]. **Transition** [TZG+23, TDH+23]. **translation** [TOYK22]. **Translator** [RSS+21]. **Transmission** [Suv21b]. **Transparently** [LKHK23]. **Transport** [Suv21a]. **Transprecision** [MSZB19]. **TriCheck** [TML+17a, TML+17b, TML+17c]. **Triggered** [NNPG23]. **Trigonometric** [GZC22, NKH+21]. **Triple** [HJ23]. **Triple-Level** [HJ23]. **Trisection** [TML+17a, TML+17b, TML+17c]. **Trojan** [DCM23, PGTD23]. **Trojan-D2** [PGTD23]. **Trojan-ing** [DCM23]. **Trojans** [ARH+22, DCM23, PGTD23]. **True** [ZNF21]. **Trust** [SJBS21]. **Trusted** [AVS+22, BCZ21a, HDT+20, MCL+21, SNOT21, USQ+22]. **TrustZone** [SNOT21].

TS [SNOT21]. **TS-Perf** [SNOT21]. **tuning** [YCL+23]. **Tutorial** [Ano22, GG18]. **TVM** [CLC+20, YCL+23]. **Type** [BDdD19a, KK23]. **Typed** [KKK+17a, KKK+17b, KKK+17c].

UAV [KMB22]. **UEFI** [Zha22]. **UK** [BBdD17]. **Ultra** [ABP22, ERGK21, GRC+19, KMB22, PCL+23, TBR+22, VTS+23, ZSB20, ZWL+20, SCR+17]. **Ultra-efficient** [ZSB20]. **Ultra-Low** [ABP22, KMB22, PCL+23]. **Ultra-Low-Power** [TBR+22, ERGK21, VTS+23, ZWL+20, SCR+17]. **Ultraefficient** [ZSB21]. **Ultralow** [PPYB23]. **Ultralow-Power** [PPYB23]. **UltraScale** [dOK23, SFGB20]. **Undergraduates** [MSJ19]. **Unified** [HSE+24]. **Uniform** [HZS+19]. **Unifying** [EHK20]. **Unit** [AVS+22, AvAG21, BPF+22, CRRS22, CTSG22, GKB+22, ISM+23, LYZH20, MSZB19, MC22, MSSS23, MAS18, MST+23, PS22b, QCL+23, SMB17, ZHX+22, ZSM21, EHN23]. **Universal** [LLS22]. **Unprivileged** [WA21]. **Unprotected** [DG22, FvHC+23]. **Unum** [BDdD19b, BDdD19a]. **Updates** [SCL+21]. **Upsets** [BWZ+21]. **Usage** [LVR+20]. **use** [Szk21]. **user** [CLM+22]. **user-level** [CLM+22]. **Using** [BDdD19a, DAKK19, FSMU21, GJC23, HCP+21, IFO+18, JZWL23, KKH+20, KGBH22, KFGH+23, KK23, LYL23, MSSS23, MAS18, POMD22, RSA+23, RMF22, SLMS21, TBK+19, VKG22, XYT+22, XYT+23, ZZB+20, AFP+17, BPS+23, BHD23, CSM22, GG18, GLS21, HGD20b, JSB20, JRW+23, KSAL21, LCCS21, LLS22, MKM20, PLSK20, SFGB20, SSD+22, WW21, ZGD22]. **Utilization** [SZHB21, ZHL+23]. **Utilizing** [JHL+21, MTT21]. **UVM** [LLS22, BMM+20, CWD+21, WTZ+20].

V [And20, Ano23b, BDdD19b, BFC+23, CKTG21, Cho19, EHK20, GBP21, KFGH+23, MTAL22, PRS+15, PCW+22, TLB+22, VKG22, WY23, dOK23, ABC+20, AAA+21, ASE+21, AKMS20, AKMS21, AS22, APHD21a, APHD21b, APSH+22, AEAS21, AvAG21, AS18, AAC+23, AFP+17, ABP22, AAB+23, And20, AHB20, ABM+23, ARH+22, Ano20, Ano22, Ano23a, Ano23c, Ano23d, Ano23f, Ano23g, Ant22, AMRCP21, AMG+20, AP14, ABW+20, ABW+21, AWB+23, ADF+23, ASH19, AHV+21, AYA+23, BKS22, BBV+23, BSSW21, BSZ+21, BWZ+21, BSZ+24, BHR+18, BRH+19, BB21, BMM+20, BCM+21, BJN23, Bar20, BFP+22, BCCM21, Ben23, BPM+21, BPF+22, BZVCB23, BBVB20, BP21, BPS+23, BWP22, BCZ21a, BCZ21b, BF23, BR24, BHGD21, BHD23, BHT+21, BGVB18, CCC+22, CIPR21, CTN18, CXLL22, CCC+19, CGG21, CG23, CDF+20, CDP+22, CRMR+23, CMV21]. **V** [CSZ+20, CV22, CPWG23, CLC+20, CXL+20a, CXL+20b, CWD+21, CLWL21, CKTK22, CYJ+22, CKTK23, CPLS23, CWS+23, CWS+24, CCA+18a, CCA+18b, Cho18, CSM22, CAL23, CKK+18, CKP19, COMP19, Cil21, CRRS21, CRRS22, CPG+23, CRP+23, CTSG22, CLW23, CSO+23, DAHK20, DHL+21, DNN23, DUM+19, DBP21, DXT+18, DBGJ19, DBGJ20, DG22, DGH19, DAPS21, DCM23, DCEJ21, DYZ+22, DPV+17, DDM+20, DPP22, DKC+21, DL17, DKT+23, DZZZ23, DCC+23, DRN+23, DXYZ19, DK23, DAK+21, DKA+22, DLMP21, DCL23, DFA+23, DRC+16, DGA+17, DWG+20, DMR+20, EAI19, EAM+22, EMMB19, EAMK21, EKAK22, EEI+18, ELG20, ETR+20, ET21, EHN23, EGBS22, FSPB21, FDS+23, FHY19, FFW20, FWZL19, FHL+22, FdRES23, FKS22, FTRH20, FGD+19, FRC+18, FvHC+23, FSMU21, FSMG+19, FSS20, FHD22, FAPHD23, FDMM22, GM21, GZ22, GZC22, GCL+23,

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