

# A Bibliography of the Annual *Cool Chips Symposia*

Nelson H. F. Beebe  
University of Utah  
Department of Mathematics, 110 LCB  
155 S 1400 E RM 233  
Salt Lake City, UT 84112-0090  
USA

Tel: +1 801 581 5254  
FAX: +1 801 581 4148

E-mail: [beebe@math.utah.edu](mailto:beebe@math.utah.edu), [beebe@acm.org](mailto:beebe@acm.org), [beebe@computer.org](mailto:beebe@computer.org) (Internet)  
WWW URL: <http://www.math.utah.edu/~beebe/>

12 December 2019  
Version 0.17

## Title word cross-reference

**4** [Mac00]. **4-way** [OSS+00]. **40Mbps** [KLCK00].

**1** [MS03]. **3** [CUH+11, JPJ+03, KLI+00, MKT+13, Nam99].  **$\mu$**  [F+99, TSI+11].

**-D** [MS03].

**0.25** [F+99]. **000-fps** [KII09].

**1** [I+99, OAN+11]. **1.4GFLOPS** [OSS+00]. **1/SW** [NTK+00a, NTK+00b]. **11** [IS03]. **1149.1** [Y+99b]. **14-16** [Ano04]. **16-bit** [IS03, R+99]. **16-Core** [YMA+13]. **162MHz** [SMS+00]. **16Mbit** [Mac00].

**2** [Ike99, IKN+99, IKN+03]. **2.3V** [T+99b]. **2.4GHz** [CPK+03]. **2011** [IEE11].

**3./** [Sch03]. **300MHz** [T+99b]. **350MHz** [OSS+00]. **3DTV** [PKKK11]. **3G** [IAK+03].

**5.6GOPS** [OSS+00]. **5.6GOPS/1.4GFLOPS** [OSS+00]. **5/ST50** [Uch00].

**60** [NKT+11]. **60-GHz** [NKT+11].

**7** [TSI+11].

**80** [OKN+11a].

**90nm** [VSPN03].

**A8051** [LLC03]. **Acceleration** [KLI+00, Nam99]. **Accelerator** [IAK+03, JPJ+03, OYS+11, T+99a, TSO00, OAN+11]. **active** [PKKK11]. **Ad** [LLC03]. **Ad-hoc** [LLC03]. **Adaptive** [AJ03]. **Addressable** [TDC+11]. **Advanced** [SYKM11, Uch00].

**advisory** [Ano11f]. **Age** [Mak00, MEY01]. **Aimed** [MOT+03b]. **Algorithm** [KOK+03]. **Alignment** [KP03]. **ALU** [R+99]. **Ambient** [Rab03]. **Analysis** [CK11b, Miy03, CK11a]. **Anticipation** [Koh03]. **Application** [CPK+03, IAK+03, Mat03, Kiy00, YHT+11]. **Applications** [HOY+03, HHNK09, KIM+09, MOT+03a, MTA+03, Uch00, VSPN03, TSI+11, TFH+03]. **Approach** [ERG03]. **April** [Ano99, Ano00, Ano01, Ano02, Ano03, Ano04, IEE11]. **Architecture** [Col99, DSET+03, Fly99, Gon99, Gon00, HHNK09, Ike99, IKM00, Mit99, SMH+03]. **architectures** [Ano11m]. **Area** [Hen00, NTK+00a, NTK+00b]. **ARM920T** [Lar99]. **Arrays** [OYS+11]. **ASICs** [Kob99]. **asymptotically** [LMW03]. **Async** [AITA03]. **Async-WASMII** [AITA03]. **Asynchronous** [Fur03a, Fur03b, IKN+03, LLC03, Nan03]. **audio** [Mac00]. **Aware** [KKL+09, HSB+03].

**Baseband** [JH03, Ano11m, TSI+11, YYS+11]. **Based** [KP03, YIA+03, Gon00, Ike99, Y+99b]. **Basic** [Fly99]. **Better** [Mak00, MEY01]. **Bias** [Miy03]. **biography** [Ano11d, Ano11t]. **BIST** [Y+99b]. **bit** [IS03, R+99]. **Block** [KP03, MOT+03a]. **Block-Based** [KP03]. **Block-noise-free** [MOT+03a]. **Blood** [Alt11]. **Body** [Miy03, NSI+03]. **Body-Tied** [NSI+03]. **Brain** [Shi99]. **Branch** [K+99b]. **Broadcast** [NOH+03]. **Broadcasting** [SYKM11]. **Browsing** [Zuc04]. **Buffer** [K+99b]. **Built** [Dit00]. **Bunka** [Ano03, Ano04, IEE11]. **Burst** [KLCK00]. **Business** [Koh03].

**Cache** [KP03, PLL+00, Taj03, ZJM+03]. **CalmRISC** [K+99a]. **Camera** [MOT+03a, SYKM11]. **Capable** [MOT+03a]. **Card** [Sut99, T+99a]. **carrier** [NKT+11]. **Cells** [YIA+03]. **Center** [Ano03, Ano04, IEE11]. **chair** [Ano11f, Ano11g]. **chairs** [Ano11h]. **Challenges** [Bor99a, Bor99b]. **Changing** [AHL03]. **Chaotic** [MS03]. **Characterization** [HSB+03]. **Chip** [EK04, ERG03, Fur03b, IS03, IKN+99, Isa99, JH03, Lar99, MTN+00, Mat00, MOT+03b, NOH+03, OKN+11b, SKI+00, SMS+00, TFH+03, VSPN03, YOS00, Ano11n, IKM00, KSH+00]. **chip-to-chip** [Ano11n]. **Chips** [Alt11, Alt13, Ano99, Ano00, Ano01, Ano02, Ano03, Ano04, CPK+03, IEE11, IA11, IA13, Nak99, Nak00b, OYS+11, Zuc04, IA09]. **Circuits** [TAD+00]. **Clean** [Sch03]. **Clock** [T+99b, LMW03]. **Closing** [Mas00, Nis03]. **CMOS** [CPK+03, F+99]. **Co** [Sut99, YDKA03]. **Co-design** [YDKA03]. **Co-Processor** [Sut99]. **coarse** [YYS+11]. **coarse-grained** [YYS+11]. **Codec** [KIM+09, Mac00]. **coherent** [NKT+11]. **committee** [Ano11f, Ano11g, Ano11h]. **committees** [Ano11e]. **Communication** [OKN+11b, Rab03, OKN+11a]. **Communications** [Ano03, Ano04, Shi99]. **Comparisons** [KP03]. **Compatible** [Dit00, IS03]. **Compiler** [SHM+03]. **Compression** [MOT+03a]. **Computation** [Rab03]. **Computational** [Sch03]. **Computing** [HSB+03, Sch03, Mat04]. **Configurable** [Hen00, Uss00]. **Configurations** [Mat03]. **Considerations** [TAD+00]. **Considering** [Miy03]. **Consisting** [YIA+03]. **Consortium** [Gon00]. **Constructive** [TSA03]. **Consumer** [Mat00]. **Consumption** [HSB+03, IKM00]. **Content** [TDC+11]. **Contents** [Ano11a]. **Control** [KOK+03, LLC03, T+99b]. **Controlled** [KKL+09]. **Controller** [LLC03, OKN+11a]. **COOL** [IEE11, Alt11, Alt13, Ano99, Ano00, Ano01, Ano02, Ano03, Ano04, IA11, IA13, Nak99, OYS+11, CUH+11, SMH+03, Zuc04, IA09, Nak00b]. **Cooler** [Mak00, MEY01]. **Cooperative** [Ike99, MTA+03, PLL+00].

**Coprocessor** [K<sup>+</sup>99a]. **Core** [IS03, Kiy00, Nak00a, Uch00, YDKA03, YMA<sup>+</sup>13, Cor04, YYS<sup>+</sup>11]. **cores** [KSH<sup>+</sup>00]. **Correspond** [Mit99]. **Cost** [K<sup>+</sup>99b, CPK<sup>+</sup>03]. **Cost-Effective** [K<sup>+</sup>99b]. **Coupled** [MTN<sup>+</sup>00]. **CPU** [KOK<sup>+</sup>03, Mat03]. **Crusoe** [Dit00]. **Cryptographic** [T<sup>+</sup>99a]. **Cryptography** [Sut99, TSO00]. **CSLA** [TSA03].

**D** [CUH<sup>+</sup>11, JPJ<sup>+</sup>03, KLI<sup>+</sup>00, MKT<sup>+</sup>13, MS03, Nam99]. **D30V** [TWN<sup>+</sup>99]. **D30V/MPEG** [TWN<sup>+</sup>99]. **Data** [ERG03]. **Dataflow** [SMK<sup>+</sup>00a, SMK<sup>+</sup>00b]. **Datapath** [OAN<sup>+</sup>11]. **Dawn** [yC01]. **Debug** [Col99, Gon00]. **Decode** [T<sup>+</sup>99b]. **Deep** [FHR99, Fly99, TSI<sup>+</sup>11]. **deep-sleep** [TSI<sup>+</sup>11]. **Deep-Submicron** [FHR99]. **Defined** [SYY<sup>+</sup>11]. **Demodulator** [KLCK00]. **density** [LMW03]. **dependable** [OKN<sup>+</sup>11a]. **Design** [AHL03, Bor99a, Bor99b, ERG03, FHR99, Fur03a, HHNK09, J<sup>+</sup>99, Kob99, Kyu99, LLC03, Miy03, Nan03, R<sup>+</sup>99, TSA03, CUH<sup>+</sup>11, VSPN03, YDKA03]. **designed** [IKN<sup>+</sup>03]. **Designs** [Alt11, Ano11p]. **detection** [NKT<sup>+</sup>11]. **Development** [Nak00a]. **Deviation** [Mit99]. **Device** [YDKA03]. **Devices** [Alt13, JPJ<sup>+</sup>03, MAA<sup>+</sup>11]. **Digital** [Alt13, KLCK00, MOT<sup>+</sup>03a, Mat00, NOH<sup>+</sup>03, Tak99, LMW03]. **Direct** [SMK<sup>+</sup>00a, SMK<sup>+</sup>00b]. **Directed** [CK11b, CK11a]. **direction** [MAA<sup>+</sup>11]. **Directions** [Mak00, MEY01]. **Discussion** [IMD<sup>+</sup>00, SMH<sup>+</sup>03]. **discussions** [Ano11r, MAA<sup>+</sup>11]. **Distributed** [I<sup>+</sup>99, Y<sup>+</sup>99a]. **distribution** [LMW03]. **Distributor** [ERG03]. **Domain** [NKI<sup>+</sup>09]. **DRAM** [IKM00, Mac00, Sak03]. **DRAM/Logic** [IKM00]. **DRLE** [F<sup>+</sup>99]. **DRP** [AJ03]. **DSP** [YOS00, VSPN03, Y<sup>+</sup>99b]. **Dual** [J<sup>+</sup>99, KSH<sup>+</sup>00]. **Dual-Port** [J<sup>+</sup>99]. **Dynamic** [KOK<sup>+</sup>03, TAD<sup>+</sup>00, YYS<sup>+</sup>11].

**Dynamically** [AJ03, F<sup>+</sup>99, IKN<sup>+</sup>03].

**edge** [PKKK11]. **editor** [IA13, Nak99]. **Editors** [IA09]. **Effective** [K<sup>+</sup>99b]. **Efficient** [K<sup>+</sup>99a, Sch03, Y<sup>+</sup>99b]. **Electronics** [Mat00]. **Elements** [AHL03, MS03]. **Embedded** [AHL03, Col99, IS03, JPJ<sup>+</sup>03, J<sup>+</sup>99, LLC03, NKI<sup>+</sup>09, OSS<sup>+</sup>00, PLL<sup>+</sup>00, WM03, Mac00]. **EmDavid** [JPJ<sup>+</sup>03]. **Enable** [Zuc04]. **enables** [Rab03]. **Encoder** [Ike99, IKN<sup>+</sup>99, SMS<sup>+</sup>00]. **Encoding** [SMS<sup>+</sup>00]. **Energy** [Cor04, IKM00, Sch03]. **Engine** [F<sup>+</sup>99]. **Engines** [T<sup>+</sup>99a]. **Environment** [SKI<sup>+</sup>00, SMK<sup>+</sup>00a]. **Era** [yC00, yC01, Fly99]. **Evaluation** [Mit99, NSI<sup>+</sup>03, TSA03, AITA03]. **Evolutionary** [Shi99]. **evolutions** [MAA<sup>+</sup>11]. **Execution** [CK11b, SMK<sup>+</sup>00a, CK11a]. **Express** [OKN<sup>+</sup>11b, OKN<sup>+</sup>11a].

**F** [OKN<sup>+</sup>11a]. **Fast** [T<sup>+</sup>99a, CK11a]. **Feed** [KOK<sup>+</sup>03]. **Feed-Forward** [KOK<sup>+</sup>03]. **FGA** [KLI<sup>+</sup>00]. **Final** [Ano11b]. **Fixed** [Y<sup>+</sup>99b]. **FlexGrip** [YHT<sup>+</sup>11]. **Flexibility** [Hen00]. **Flexible** [Mat03]. **floating** [PKKK11]. **floating-point** [PKKK11]. **Forward** [KOK<sup>+</sup>03]. **Foundries** [yC01]. **Four** [MTN<sup>+</sup>00]. **Four-Way** [MTN<sup>+</sup>00]. **fps** [KII09]. **frames** [MOT<sup>+</sup>03a]. **frames/s** [MOT<sup>+</sup>03a]. **free** [MOT<sup>+</sup>03a]. **Frequency** [MTA<sup>+</sup>03]. **Frequency-Voltage** [MTA<sup>+</sup>03]. **Front** [Ano11c]. **Fujitsu** [YMA<sup>+</sup>13]. **Full** [KIM<sup>+</sup>09]. **Fully** [IKN<sup>+</sup>03, KLCK00]. **Functional** [AHL03, HOY<sup>+</sup>03]. **Fundamental** [MS03]. **Fusion** [Nan03, MAA<sup>+</sup>11]. **Future** [Nak00a, SMH<sup>+</sup>03, Miy03]. **Fuzzy** [KKL<sup>+</sup>09].

**Gates** [MS03]. **Gating** [CK11b, CK11a]. **Gbps** [NKT<sup>+</sup>11, OKN<sup>+</sup>11a]. **Generation** [Hee00, YMA<sup>+</sup>13]. **Geometry**

[KLI<sup>+</sup>00, Nam99]. **GHz**  
 [NKT<sup>+</sup>11, TFH<sup>+</sup>03]. **Gigahertz** [TAD<sup>+</sup>00].  
**glasses** [PKKK11]. **Global** [Col99]. **Going**  
 [Alt13]. **GPS** [JH03]. **grained** [YY<sup>+</sup>11].  
**Graphic** [JPJ<sup>+</sup>03]. **Graphics**  
 [KLI<sup>+</sup>00, Nam99]. **Graphs**  
 [SMK<sup>+</sup>00a, SMK<sup>+</sup>00b]. **Grid** [Mat04].  
**Guest** [IA13, IA09, Nak99].

**Hardware** [AJ03, SMK<sup>+</sup>00a, SMK<sup>+</sup>00b,  
 TSO00, YHT<sup>+</sup>11]. **harmony** [MAA<sup>+</sup>11].  
**having** [LMW03]. **HD** [KIM<sup>+</sup>09, Kiy00].  
**HD-TV** [Kiy00]. **HDTV** [NOH<sup>+</sup>03].  
**Heterogeneous** [Alt11, MKT<sup>+</sup>13].  
**Hierarchical** [ZJM<sup>+</sup>03]. **High**  
 [Ano99, Ano00, Ano01, Ano02, Ano03,  
 Ano04, Ano11n, CGMV99, ERG03, IKM00,  
 KOK<sup>+</sup>03, KSH<sup>+</sup>00, Lar99, Mat03, SNO<sup>+</sup>03,  
 Sut99, SYY<sup>+</sup>11, Taj03, Tak99, VSPN03,  
 ZJM<sup>+</sup>03, LMW03, SMH<sup>+</sup>03, YHT<sup>+</sup>11].  
**High-Performance**  
 [CGMV99, IKM00, Lar99, Sut99, Ano11n,  
 KSH<sup>+</sup>00, SMH<sup>+</sup>03, YHT<sup>+</sup>11].  
**High-Performance/Low-Energy** [IKM00].  
**High-Speed** [Ano99, Ano00, Ano01, Ano02,  
 Ano03, Ano04, ERG03, ZJM<sup>+</sup>03].  
**High-Throughput** [SYY<sup>+</sup>11]. **Highly**  
 [HOY<sup>+</sup>03, YHT<sup>+</sup>11]. **hoc** [LLC03]. **Hybrid**  
 [JH03].

**I-Cache** [KP03]. **I/F** [OKN<sup>+</sup>11a]. **IEEE**  
 [IEE11, Y<sup>+</sup>99b, Alt13]. **II**  
 [Ano99, Ano11j, Miy03]. **III**  
 [Ano00, Ano11k, Miy03, Nak00b]. **Image**  
 [KII09, MOT<sup>+</sup>03a]. **Impact** [MAA<sup>+</sup>11].  
**Implementation** [Col99, Miy03, MS03,  
 YIA<sup>+</sup>03, Y<sup>+</sup>99b, AITA03]. **implements**  
 [Gon00]. **In-System** [Kyu99]. **Increases**  
 [Hen00]. **Inductive** [MKT<sup>+</sup>13]. **inherent**  
 [LMW03]. **inner** [CK11a]. **Instruction**  
 [T<sup>+</sup>99b]. **Integrated** [Taj03]. **Intel** [Hee00].  
**Intelligence** [Rab03]. **intelligent**  
 [OKN<sup>+</sup>11a]. **Interconnect**  
 [Fur03b, Ano11n, CUH<sup>+</sup>11].

**interconnection** [CUH<sup>+</sup>11]. **Interface**  
 [Col99, K<sup>+</sup>99a, MKT<sup>+</sup>13]. **International**  
 [Ano99, Ano00, Ano01, Ano02, Ano03,  
 Ano04]. **Internet** [Isa99]. **interrupt**  
 [OKN<sup>+</sup>11a]. **Introducing** [Nak99].  
**Introduction** [Fur03a, IA09, Nak99, IA13].  
**invariance** [LMW03]. **Invited**  
 [Bor99b, Fur03b, Hee00, Koh03, Kyu99,  
 Mat00, Sch03, Shi99, Tak99, Ano11d]. **IP**  
 [yC00, yC01]. **Issues** [FHR99, Fly99]. **IV**  
 [Ano01, Ano02, Ano11l]. **IX** [Ano11m].

**Japan** [Ano99, Ano00, Ano01, Ano02,  
 Ano03, Ano04, IEE11]. **Japanese** [Sak03].  
**Joho** [Ano03, Ano04, IEE11]. **JPEG2000**  
 [MOT<sup>+</sup>03a]. **JUMP** [I<sup>+</sup>99]. **JUMP-1**  
 [I<sup>+</sup>99]. **Just** [SHM<sup>+</sup>03].

**Kaikan** [Ano00, Ano01, Ano02]. **Key**  
 [Sut99, TSO00]. **Keynote**  
 [Ano11d, Ano11k, Ano11o, Ano11q, yC00,  
 Dit00, Fly99, Mak00, Rab03, Sak03]. **Kikai**  
 [Ano00, Ano01, Ano02].  
**Kikai-Shinko-Kaikan**  
 [Ano00, Ano01, Ano02]. **Kyoto** [Ano99].

**L2** [Taj03]. **Large** [Kob99, OAN<sup>+</sup>11].  
**Large-Scale** [Kob99]. **Late** [DSET<sup>+</sup>03].  
**Latency** [Mit99]. **Layer** [Ike99]. **Level**  
 [K<sup>+</sup>99b]. **light** [I<sup>+</sup>99]. **line** [TDC<sup>+</sup>11]. **List**  
 [Ano11e]. **Local** [NTK<sup>+</sup>00a, NTK<sup>+</sup>00b].  
**Logic** [F<sup>+</sup>99, IKM00, IKN<sup>+</sup>03]. **Logical**  
 [MS03]. **Loop** [CK11b, CK11a].  
**Loop-Directed** [CK11b, CK11a]. **loops**  
 [CK11a]. **Low**  
 [Ano99, Ano00, Ano01, Ano02, Ano03,  
 Ano04, Ano11p, CPK<sup>+</sup>03, Dit00, HOY<sup>+</sup>03,  
 JH03, KP03, KOK<sup>+</sup>03, Kob99, Lar99, Mat00,  
 Miy03, MOT<sup>+</sup>03b, PLL<sup>+</sup>00, R<sup>+</sup>99, SYY<sup>+</sup>11,  
 Tak99, T<sup>+</sup>99a, VSPN03, ZJM<sup>+</sup>03, CUH<sup>+</sup>11,  
 Mac00, NKT<sup>+</sup>11, OAN<sup>+</sup>11, PKKK11,  
 Rab03, TSI<sup>+</sup>11]. **Low-cost** [CPK<sup>+</sup>03].  
**Low-Energy** [IKM00]. **Low-Power**  
 [Ano99, Ano00, Ano01, Ano02, Ano03, Ano04,

Dit00, HOY+03, Lar99, Miy03, MOT+03b, PLL+00, SYY+11, T+99a, Ano11p, CPK+03, NKT+11, PKKK11, TSI+11]. **LSI** [CUH+11, Ike99, Isa99, IKN+03, Mac00, Miy03, NOH+03, NTK+00a, NTK+00b, TSI+11]. **LSIs** [IKM00].

**m** [F+99, F+99]. **M-Transistor** [F+99]. **M32R** [SHM+03]. **MAC** [TFH+03]. **MAC/PHY** [TFH+03]. **Management** [I+99]. **Mapping** [SMK+00b]. **Market** [Gon99]. **match** [TDC+11]. **matter** [Ano11c]. **MBP** [I+99]. **MBP-light** [I+99]. **MCORE** [Col99, Gon00]. **MCP2** [Kiy00]. **MDSP** [YOS00]. **Measurement** [HSB+03]. **Mechanism** [KP03]. **Media** [Ano03, Ano04, Kiy00, SMS+00]. **Media-Processor** [SMS+00]. **Mega** [OYS+11]. **Mega-Arrays** [OYS+11]. **members** [Ano11e]. **Memory** [Alt13, I+99, IKM00, J+99, Mat03, Mit99, YIA+03, TDC+11]. **Memory-Path** [IKM00]. **Merged** [IKM00]. **Merlot** [MTN+00, SKI+00]. **Message** [Ano11f, Ano11g, Ano11h]. **Method** [TSO00]. **Methodology** [Kob99]. **Micro** [Gon99, Alt13]. **Micro-RISC** [Gon99]. **Microcontroller** [NSI+03, SNO+03]. **Microprocessor** [Dit00, FHR99, OSS+00, Taj03, TAD+00, Uch00]. **Microprocessors** [CGMV99, HSB+03]. **MICROS** [CPK+03]. **MIPS** [Nak00a]. **Mobile** [Alt13, IAK+03, JPJ+03, KIM+09, MAA+11, TSI+11]. **Model** [Sch03]. **Montgomery** [TSO00]. **MorphoSys** [DSET+03]. **Mothballing** [CK11b, CK11a]. **MP98** [SKI+00]. **MPEG** [Ike99, IKN+99, IAK+03, Mac00, TWN+99]. **MPEG-2** [Ike99, IKN+99]. **MPEG-4** [Mac00, IAK+03]. **MPEG4** [KOK+03]. **MulTEP** [WM03]. **Multi** [KOK+03, MTN+00, MTA+03, MOT+03b, SKI+00, Sut99, ZJM+03, Cor04, NKT+11]. **multi-core** [Cor04]. **Multi-Gbps** [NKT+11]. **Multi-Port** [ZJM+03].

**Multi-Processor** [MOT+03b, SKI+00]. **Multi-Purpose** [Sut99]. **Multi-regulated** [KOK+03]. **Multi-tasking** [MTA+03]. **Multi-Thread** [MTN+00]. **Multicontext** [YDKA03]. **Multicore** [MKT+13, NKI+09, OKN+11b, OKN+11a]. **Multimedia** [MTA+03, TWN+99, T+99b, Uch00, YOS00, KSH+00]. **multimodal** [YYS+11]. **Multiprocessor** [EK04]. **Multistandard** [KIM+09]. **MulTithreaded** [WM03].

**Network** [CPK+03, NTK+00a, NTK+00b]. **Networking** [Uch00]. **networks** [MAA+11]. **Neuro** [KKL+09]. **Neuro-Fuzzy** [KKL+09]. **New-Generation** [YMA+13]. **Next** [Hee00]. **Nexus** [Gon00]. **noise** [MOT+03a]. **Nomadic** [Mak00, MEY01]. **novel** [LMW03].

**Object** [KKL+09]. **offs** [AHL03]. **On-Chip** [Fur03b, IKM00]. **Open** [yC01]. **Opening** [NKYT00]. **optimal** [MAA+11]. **optimisation** [Cor04]. **Optimized** [DSET+03]. **Order** [Taj03]. **Organization** [K+99b]. **organizing** [Ano11g]. **Out-of-Order** [Taj03].

**page** [Ano11u]. **Panel** [Ano11r, IMD+00, MAA+11, SMH+03]. **Parallel** [KII09, Y+99a]. **Parallel/Distributed** [Y+99a]. **Park** [Ano99]. **Part** [Miy03]. **Partitioning** [NKI+09]. **Path** [IKM00]. **PCA** [AITA03, IKN+03]. **PCA-2** [IKN+03]. **PCI** [OKN+11a, OKN+11b]. **PDP** [IS03]. **PDP-11** [IS03]. **Peach** [OKN+11b]. **Performance** [AHL03, CGMV99, Lar99, Mat03, Miy03, SNO+03, Sut99, Taj03, VSPN03, Ano11n, KSH+00, LMW03, SMH+03, YHT+11]. **Performance/Low** [IKM00]. **Peripherals** [Taj03]. **PHY** [TFH+03]. **Pipelining** [KKL+09]. **PipeRench** [Sch03]. **Pixel**

[KII09]. **Pixel-Parallel** [KII09]. **Platform** [Mat03, Nak00a]. **Platforms** [Uss00]. **Point** [Y+99b, PKKK11]. **Port** [Gon00, Hen00, J+99, ZJM+03]. **Portable** [YOS00]. **Poster** [Ano11i, Ano11j, Hen00, IKM00, Nak00a, NTK+00a, SKI+00, SMK+00a, TSO00, Uss00]. **Power** [Ano99, Ano00, Ano01, Ano02, Ano03, Ano04, CK11b, CK11a, Dit00, HOY+03, HSB+03, JH03, KP03, KOK+03, Kob99, Lar99, Mat00, MTA+03, Miy03, MOT+03b, OYS+11, PLL+00, Rab03, R+99, SYY+11, Tak99, TAD+00, T+99a, VSPN03, ZJM+03, Ano11p, CUH+11, CPK+03, Mac00, NKT+11, OAN+11, PKKK11, TSI+11]. **Power-aware** [HSB+03]. **Power-gating** [CK11a]. **Power/High** [KOK+03]. **Powertrain** [SNO+03]. **Preambleless** [KLCK00]. **preface** [Ano11i]. **Presentation** [yC00, Dit00, Fur03b, Hee00, Koh03, Mak00, Mat00, Rab03, Sak03, Sch03, Ano11k, Ano11o, Ano11q]. **Processing** [AHL03, Hen00, Uss00, Y+99a]. **Processor** [Col99, Fly99, Hen00, HHNK09, IS03, I+99, IAK+03, Kiy00, KII09, KLI+00, Lar99, MOT+03a, MTN+00, Mit99, MOT+03b, Nak00a, Nam99, PLL+00, SKI+00, SMS+00, Sut99, Tak99, TWN+99, T+99b, TFH+03, YDKA03, Y+99a, Y+99b, YMA+13, KSH+00, PKKK11, YYS+11]. **Processor/Multicontext** [YDKA03]. **Processors** [Fur03b, Kyu99, NKI+09, SHM+03, SYY+11, Ano11l, WM03]. **Product** [Nak00a]. **program** [Ano11b, Ano11h]. **Programmable** [IS03, YHT+11]. **Projection** [Miy03]. **Protocol** [Hen00, Isa99]. **Public** [Sut99, TSO00]. **Public-Key** [TSO00]. **Purpose** [Sut99]. **PVT** [LMW03].

**QPSK** [KLCK00]. **Quality** [KOK+03]. **QVGA** [KII09]. **QVGA-Size** [KII09].

**Radio** [CPK+03, SYY+11]. **Rates** [AHL03].

**Ray** [DSET+03]. **Real** [Gon00, KKL+09, Y+99a]. **Real-Time** [Gon00, KKL+09, Y+99a]. **realize** [Mat03]. **Rebirth** [Sak03]. **Receivers** [NOH+03]. **Recognition** [HHNK09, KKL+09].

**Reconfigurable** [AHL03, Ano11l, DSET+03, ERG03, F+99, IKN+03, OYS+11, SMK+00a, SMK+00b, Sch03, SYY+11, YIA+03, OAN+11, YYS+11].

**Redefining** [Uss00]. **Reduce** [KP03]. **Reduction** [MTA+03]. **regulated** [KOK+03]. **Remarks** [Mas00, NKYT00, Nis03]. **Research** [Ano99, Koh03]. **Responsive** [Y+99a].

**RHiNET** [NTK+00a, NTK+00b]. **RHiNET-1** [NTK+00a, NTK+00b]. **RHiNET-1/SW** [NTK+00a, NTK+00b].

**Rijndael** [AITA03]. **RISC** [CGMV99, Gon99]. **Roadmap** [Nak00a]. **Roadmap/Development** [Nak00a]. **roles** [MAA+11]. **Routers** [ERG03]. **RSA** [T+99a]. **Runtime** [CK11b].

**s** [MOT+03a]. **Scalable** [MKT+13, CUH+11]. **Scale** [Kob99]. **Scaling** [Bor99a, Bor99b]. **Schematic** [Miy03]. **Scheme** [K+99a, LMW03]. **Schemes** [LLC03]. **Self** [J+99]. **Self-Testable** [J+99]. **sensing** [TDC+11]. **Sensornet** [HHNK09]. **sequential** [YHT+11]. **Servers** [YMA+13, MAA+11]. **Session** [Ano11k, Ano11j, Ano11l, Ano11m, Ano11n, Ano11o, Ano11q, Ano11p, Ano11r, Ano11s, Ano11t]. **SH** [Uch00]. **SH-5** [Uch00]. **SH-5/ST50** [Uch00]. **Shared** [I+99]. **Shinko** [Ano00, Ano01, Ano02]. **short** [Ano11j]. **shutter** [PKKK11]. **Signal** [Tak99]. **Silent** [OAN+11]. **Single** [Isa99, MTN+00, NOH+03, SKI+00, SMS+00, TFH+03, NKT+11]. **single-carrier** [NKT+11]. **Single-Chip** [Isa99, MTN+00, SKI+00, SMS+00]. **Size** [KII09]. **Skew** [T+99b, LMW03]. **SLD** [OAN+11]. **SLD-1** [OAN+11]. **sleep**

[TSI<sup>+</sup>11]. **Small** [T<sup>+</sup>99a, YHT<sup>+</sup>11]. **Smart** [Sut99]. **SoC** [HOY<sup>+</sup>03, OKN<sup>+</sup>11a, Uss00]. **society** [MAA<sup>+</sup>11]. **Software** [Dit00, SKI<sup>+</sup>00, SMK<sup>+</sup>00a, SYY<sup>+</sup>11]. **Software-Defined** [SYY<sup>+</sup>11]. **SOI** [NSI<sup>+</sup>03]. **Solution** [HOY<sup>+</sup>03, MOT<sup>+</sup>03b]. **Sparc64** [YMA<sup>+</sup>13]. **speaker** [Ano11d, Ano11t]. **Special** [Ano11s, Ano11t]. **Specification** [Gon00]. **Speech** [Bor99b, Fly99, Kyu99, Shi99, Tak99]. **speeches** [Ano11j]. **Speed** [Ano99, Ano00, Ano01, Ano02, Ano03, Ano04, Tak99, ERG03, ZJM<sup>+</sup>03]. **SRAM** [YIA<sup>+</sup>03]. **SRAM-Based** [YIA<sup>+</sup>03]. **ST50** [Uch00]. **Standard** [Col99]. **Strategy** [yC00]. **Stream** [ERG03]. **StrongARM** [Hee00]. **Structure** [PLL<sup>+</sup>00]. **Styles** [Nan03]. **Submicron** [FHR99, Fly99]. **Submission** [DSET<sup>+</sup>03]. **Super** [Sut99]. **SuperENC** [Ike99, IKN<sup>+</sup>99]. **Superscalar** [Taj03]. **SW** [NTK<sup>+</sup>00a, NTK<sup>+</sup>00b]. **Switch** [NTK<sup>+</sup>00a, NTK<sup>+</sup>00b]. **Symposium** [Ano99, Ano00, Ano01, Ano02, Ano03, Ano04]. **sync** [PKKK11]. **Synchronous** [Nan03]. **Synthesizable** [Nak00a]. **System** [AHL03, IKN<sup>+</sup>03, JH03, KLI<sup>+</sup>00, Kyu99, Lar99, Mat00, Miy03, MOT<sup>+</sup>03b, NTK<sup>+</sup>00a, OKN<sup>+</sup>11b, PLL<sup>+</sup>00, LMW03, NKT<sup>+</sup>11, NOH<sup>+</sup>03, NTK<sup>+</sup>00b]. **System-On-a-Chip** [JH03, Lar99]. **Systems** [Koh03, Mat03, Shi99, Cor04].

**Table** [K<sup>+</sup>99b]. **Tag** [KP03]. **Target** [K<sup>+</sup>99b]. **Task** [KKL<sup>+</sup>09]. **tasking** [MTA<sup>+</sup>03]. **TATSU** [TSO00]. **technique** [NKT<sup>+</sup>11, TDC<sup>+</sup>11]. **Technologies** [Mat00, SYKM11]. **Technology** [Bor99a, Bor99b, Fly99, Hee00, NKI<sup>+</sup>09, NSI<sup>+</sup>03, CUH<sup>+</sup>11]. **Telematics** [HOY<sup>+</sup>03]. **Testable** [J<sup>+</sup>99]. **Tester** [YIA<sup>+</sup>03]. **Their** [MAA<sup>+</sup>11]. **Theoretical** [Miy03]. **Thread** [MTN<sup>+</sup>00]. **Three** [Ike99]. **Three-Layer** [Ike99]. **Threshold** [Miy03]. **Throughput** [SYY<sup>+</sup>11]. **ThruChip** [MKT<sup>+</sup>13]. **Tied** [NSI<sup>+</sup>03]. **Tightly** [MTN<sup>+</sup>00]. **Time** [Gon00, KKL<sup>+</sup>09, SHM<sup>+</sup>03, Y<sup>+</sup>99a]. **timer** [PKKK11]. **Timing** [TSA03]. **Title** [Ano11u]. **Tokyo** [Ano00, Ano01, Ano02]. **tracer** [PKKK11]. **Tracing** [DSET<sup>+</sup>03]. **Trade** [AHL03]. **Trade-offs** [AHL03]. **Transistor** [F<sup>+</sup>99]. **Transmeta** [Dit00]. **Transmission** [KLCK00]. **TV** [Kiy00]. **Two** [K<sup>+</sup>99b]. **Two-Level** [K<sup>+</sup>99b].

**Ubiquitous** [CPK<sup>+</sup>03, Zuc04]. **Ultra** [Koh03, Rab03, OAN<sup>+</sup>11, TSI<sup>+</sup>11]. **Ultra-low** [Rab03]. **Ultralow** [OYS<sup>+</sup>11]. **Ultralow-Power** [OYS<sup>+</sup>11]. **Units** [CK11b, CK11a]. **universal** [PKKK11]. **Unix** [YMA<sup>+</sup>13]. **Untitled** [Sat04]. **Using** [CK11b, SYY<sup>+</sup>11, TSO00, CK11a, NKT<sup>+</sup>11, YYS<sup>+</sup>11]. **UWB** [Koh03].

**V** [Ano11n]. **V850E2** [Mat03]. **Variations** [AHL03]. **Various** [Mat03]. **Ver.1** [SKI<sup>+</sup>00]. **Verification** [Kyu99]. **Versatile** [HHNK09]. **VI** [Ano03, Ano11o]. **via** [TSA03]. **Video** [Ike99, IKN<sup>+</sup>99, KIM<sup>+</sup>09, Mac00]. **video/audio** [Mac00]. **videophone** [KSH<sup>+</sup>00]. **Videophones** [IAK<sup>+</sup>03]. **VII** [Ano04, Ano11p]. **VIII** [Ano11q]. **Violation** [TSA03]. **Vision** [KII09]. **VLIW** [KSH<sup>+</sup>00, KLI<sup>+</sup>00, Nam99, OSS<sup>+</sup>00]. **Voice** [Isa99]. **Voltage** [KOK<sup>+</sup>03, MTA<sup>+</sup>03, Miy03]. **VR7701** [Taj03].

**W** [TSI<sup>+</sup>11]. **WASMII** [AITA03]. **Way** [MTN<sup>+</sup>00, OSS<sup>+</sup>00]. **Web** [Zuc04]. **Welcome** [NKYT00]. **which** [Mat03, Mit99]. **Wideband** [Koh03]. **Wireless** [Ano11m, Gon99, Koh03, YYS<sup>+</sup>11]. **WLAN** [TSI<sup>+</sup>11, TFH<sup>+</sup>03]. **Workload** [KKL<sup>+</sup>09]. **Workload-Aware** [KKL<sup>+</sup>09].

**X** [Ano11r, YMA<sup>+</sup>13]. **x86** [Dit00].

x86-Compatible [Dit00]. XIV [IEE11].

Yokohama [Ano03, Ano04, IEE11].

zero [LMW03].

## References

- [AHL03] Seong-Yong Ahn, Yo-Seop Hwang, and Jeong-A Lee. Design variations and performance trade-offs by changing processing rates of functional elements in a reconfigurable embedded system. In Anonymous [Ano03], page ?? ISBN ??? LCCN ????
- [AITA03] Yoshinori Adachi, Kenichiro Ishikawa, Satoshi Tsutsumi, and Hideharu Amano. An implementation and evaluation of the Rijndael on Async-WASMII with PCA. In Anonymous [Ano03], page ?? ISBN ??? LCCN ????
- [AJ03] Hideharu Amano and Akiya Jouraku. Dynamically adaptive hardware on DRP. In Anonymous [Ano03], page ?? ISBN ??? LCCN ????
- [Alt11] Erik R. Altman. New blood, cool chips, and heterogeneous designs. *IEEE Micro*, 31(6):2–3, November/December 2011. CODEN IEMIDZ. ISSN 0272-1732 (print), 1937-4143 (electronic).
- [Alt13] Erik R. Altman. Cool chips, mobile devices, memory, and IEEE Micro going digital. *IEEE Micro*, 33(6):2, November/December 2013. CODEN IEMIDZ. ISSN 0272-1732.
- [Ano00] Anonymous, editor. *Cool Chips III: An International Symposium on Low-Power and High-Speed Chips, Kikai-Shinko-Kaikan, Tokyo, Japan April 24–25, 2000*. ????, ????, 2000.
- [Ano01] Anonymous, editor. *Cool Chips IV: An International Symposium on Low-Power and High-Speed Chips, Kikai-Shinko-Kaikan, Tokyo, Japan April 19–20, 2001*. ????, ????, 2001.
- [Ano02] Anonymous, editor. *Cool Chips IV: An International Symposium on Low-Power and High-Speed Chips, Kikai-Shinko-Kaikan, Tokyo, Japan April 18–20, 2001*. ????, 2002.
- [Ano03] Anonymous, editor. *Cool Chips VI: An International Symposium on Low-Power and High-Speed Chips, Kikai-Shinko-Kaikan, Tokyo, Japan April 26–27, 1999*. ????, ????, 1999.
- [Ano99] Anonymous, editor. *Cool Chips II: An International Symposium on Low-Power and High-Speed Chips: Kyoto Research Park. Kyoto, Japan on April 26–27, 1999*. ????, ????, 1999.



- sium on Low-Power and High-Speed Chips, Yokohama Joho Bunka Center, Yokohama, Japan (Yokohama Media & Communications Center, Yokohama, Japan) April 16–18, 2003.* ????, 2003. ISBN ????. LCCN ????
- [Ano04] **Anonymous:2004:CCV**  
 Anonymous, editor. *Cool Chips VII: An International Symposium on Low-Power and High-Speed Chips, Yokohama Joho Bunka Center, Yokohama, Japan (Yokohama Media & Communications Center, Yokohama, Japan) April 14–16, 2004.* ????, 2004. ISBN ????. LCCN ????
- [Ano11a] **Anonymous:2011:C**  
 Anonymous. Contents. In *2011 IEEE COOL Chips XIV: Yokohama Joho Bunka Center, Yokohama, Japan, April 20–22, 2011* [IEE11], page xxviii. CODEN IRELAO. ISBN 1-61284-884-2. ISSN 0367-9950. LCCN ????. URL <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=5890911>. IEEE Catalog Number CFP11COL-ART.
- [Ano11b] **Anonymous:2011:FP**  
 Anonymous. Final program. In *2011 IEEE COOL Chips XIV: Yokohama Joho Bunka Center, Yokohama, Japan, April 20–22, 2011* [IEE11], pages ix–xvii. CODEN IRELAO. ISBN 1-61284-884-2. ISSN 0367-9950. LCCN ????. URL <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=5890908>. IEEE Catalog Number CFP11COL-ART.
- [Ano11c] **Anonymous:2011:FM**  
 Anonymous. Front matter. In *2011 IEEE COOL Chips XIV: Yokohama Joho Bunka Center, Yokohama, Japan, April 20–22, 2011* [IEE11], pages 1–3. CODEN IRELAO. ISBN 1-61284-884-2. ISSN 0367-9950. LCCN ????. URL <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=5890903>. IEEE Catalog Number CFP11COL-ART.
- [Ano11d] **Anonymous:2011:KIS**  
 Anonymous. Keynote & invited speaker’s biography. In *2011 IEEE COOL Chips XIV: Yokohama Joho Bunka Center, Yokohama, Japan, April 20–22, 2011* [IEE11], pages xx–xxvii. CODEN IRELAO. ISBN 1-61284-884-2. ISSN 0367-9950. LCCN ????. URL <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=5890910>. IEEE Catalog Number CFP11COL-ART.
- [Ano11e] **Anonymous:2011:LCM**  
 Anonymous. List of the committees members. In *2011 IEEE COOL Chips XIV: Yokohama Joho Bunka Center, Yokohama, Japan, April 20–22, 2011* [IEE11], pages vi–viii. CODEN IRELAO. ISBN 1-61284-884-2. ISSN 0367-9950. LCCN ????. URL <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=5890910>. IEEE Catalog Number CFP11COL-ART.

/ieeexplore.ieee.org/stamp/  
stamp.jsp?tp=&arnumber=5890907.■  
IEEE Catalog Number CFP11COL-■  
ART.

**Anonymous:2011:MAC**

- [Ano11f] Anonymous. Message from the advisory committee chair. In [Ano11i] *2011 IEEE COOL Chips XIV: Yokohama Joho Bunka Center, Yokohama, Japan, April 20–22, 2011* [IEE11], page iii. CODEN IRELAO. ISBN 1-61284-884-2. ISSN 0367-9950. LCCN ????. URL <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=5890905>. IEEE Catalog Number CFP11COL-■ ART.

**Anonymous:2011:MOC**

- [Ano11g] Anonymous. Message from the organizing committee chair. In [Ano11j] *2011 IEEE COOL Chips XIV: Yokohama Joho Bunka Center, Yokohama, Japan, April 20–22, 2011* [IEE11], pages i–ii. CODEN IRELAO. ISBN 1-61284-884-2. ISSN 0367-9950. LCCN ????. URL <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=5890904>. IEEE Catalog Number CFP11COL-■ ART.

**Anonymous:2011:MPC**

- [Ano11h] Anonymous. Message from the program committee chairs. In [Ano11k] *2011 IEEE COOL Chips XIV: Yokohama Joho Bunka Center, Yokohama, Japan, April 20–22, 2011* [IEE11], pages iv–v. CODEN IRELAO. ISBN 1-61284-884-2. ISSN 0367-9950.

LCCN ????. URL <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=5890906>. IEEE Catalog Number CFP11COL-■ ART.

**Anonymous:2011:PP**

- Anonymous. Poster preface. In *2011 IEEE COOL Chips XIV: Yokohama Joho Bunka Center, Yokohama, Japan, April 20–22, 2011* [IEE11], pages 1–2. CODEN IRELAO. ISBN 1-61284-884-2. ISSN 0367-9950. LCCN ????. URL <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=5890914>. IEEE Catalog Number CFP11COL-■ ART.

**Anonymous:2011:SIP**

- Anonymous. Session II: Poster short speeches. In *2011 IEEE COOL Chips XIV: Yokohama Joho Bunka Center, Yokohama, Japan, April 20–22, 2011* [IEE11], page 1. CODEN IRELAO. ISBN 1-61284-884-2. ISSN 0367-9950. LCCN ????. URL <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=5890913>. IEEE Catalog Number CFP11COL-■ ART.

**Anonymous:2011:SIK**

- Anonymous. Session III: Keynote presentation 3. In *2011 IEEE COOL Chips XIV: Yokohama Joho Bunka Center, Yokohama, Japan, April 20–22, 2011* [IEE11], pages 1–2. CODEN IRELAO. ISBN 1-61284-884-2. ISSN 0367-9950.

LCCN ????. URL <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=5890915>. IEEE Catalog Number CFP11COL-ART.

**Anonymous:2011:SIR**

[Ano11l] Anonymous. Session IV: Reconfigurable processors. In *2011 IEEE COOL Chips XIV: Yokohama Joho Bunka Center, Yokohama, Japan, April 20–22, 2011* [IEE11], page 1. CODEN IRELAO. ISBN 1-61284-884-2. ISSN 0367-9950. LCCN ????. URL <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=5890916>. IEEE Catalog Number CFP11COL-ART.

**Anonymous:2011:SIW**

[Ano11m] Anonymous. Session IX: Wireless baseband architectures. In *2011 IEEE COOL Chips XIV: Yokohama Joho Bunka Center, Yokohama, Japan, April 20–22, 2011* [IEE11], page 1. CODEN IRELAO. ISBN 1-61284-884-2. ISSN 0367-9950. LCCN ????. URL <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=5890928>. IEEE Catalog Number CFP11COL-ART.

**Anonymous:2011:SVH**

[Ano11n] Anonymous. Session V: High-performance chip-to-chip interconnect. In *2011 IEEE COOL Chips XIV: Yokohama Joho Bunka Center, Yokohama, Japan, April 20–22, 2011* [IEE11], page 1. CO-

DEN IRELAO. ISBN 1-61284-884-2. ISSN 0367-9950. LCCN ????. URL <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=5890919>. IEEE Catalog Number CFP11COL-ART.

**Anonymous:2011:SVKa**

[Ano11o] Anonymous. Session VI: Keynote presentation 4. In *2011 IEEE COOL Chips XIV: Yokohama Joho Bunka Center, Yokohama, Japan, April 20–22, 2011* [IEE11], pages 1–2. CODEN IRELAO. ISBN 1-61284-884-2. ISSN 0367-9950. LCCN ????. URL <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=5890922>. IEEE Catalog Number CFP11COL-ART.

**Anonymous:2011:SVL**

[Ano11p] Anonymous. Session VII: Low-power designs. In *2011 IEEE COOL Chips XIV: Yokohama Joho Bunka Center, Yokohama, Japan, April 20–22, 2011* [IEE11], page 1. CODEN IRELAO. ISBN 1-61284-884-2. ISSN 0367-9950. LCCN ????. URL <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=5890923>. IEEE Catalog Number CFP11COL-ART.

**Anonymous:2011:SVKb**

[Ano11q] Anonymous. Session VIII: Keynote presentation 5. In *2011 IEEE COOL Chips XIV: Yokohama Joho Bunka Center, Yokohama, Japan, April 20–*

22, 2011 [IEE11], pages 1–2. CODEN IRELAO. ISBN 1-61284-884-2. ISSN 0367-9950. LCCN ????. URL <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=5890927>. IEEE Catalog Number CFP11COL-ART.

**Anonymous:2011:SXP**

[Ano11r] Anonymous. Session X: Panel discussions. In *2011 IEEE COOL Chips XIV: Yokohama Joho Bunka Center, Yokohama, Japan, April 20–22, 2011* [IEE11], page 1. CODEN IRELAO. ISBN 1-61284-884-2. ISSN 0367-9950. LCCN ????. URL <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=5890932>. IEEE Catalog Number CFP11COL-ART.

**Anonymous:2011:SS**

[Ano11s] Anonymous. Special session 1. In *2011 IEEE COOL Chips XIV: Yokohama Joho Bunka Center, Yokohama, Japan, April 20–22, 2011* [IEE11], pages 1–4. CODEN IRELAO. ISBN 1-61284-884-2. ISSN 0367-9950. LCCN ????. URL <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=5890912>. IEEE Catalog Number CFP11COL-ART.

**Anonymous:2011:SSS**

[Ano11t] Anonymous. Special session speaker’s biography. In *2011 IEEE COOL Chips XIV: Yokohama Joho Bunka Center, Yokohama, Japan, April 20–22,*

*2011* [IEE11], pages xviii–xix. CODEN IRELAO. ISBN 1-61284-884-2. ISSN 0367-9950. LCCN ????. URL <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=5890909>. IEEE Catalog Number CFP11COL-ART.

**Anonymous:2011:TP**

[Ano11u] Anonymous. Title page. In *2011 IEEE COOL Chips XIV: Yokohama Joho Bunka Center, Yokohama, Japan, April 20–22, 2011* [IEE11], page 1. CODEN IRELAO. ISBN 1-61284-884-2. ISSN 0367-9950. LCCN ????. URL <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=5890934>. IEEE Catalog Number CFP11COL-ART.

**Borkar:1999:DCT**

[Bor99a] Shekhar Borkar. Design challenges of technology scaling. *IEEE Micro*, 19(4):23–29, July/August 1999. CODEN IEMIDZ. ISSN 0272-1732 (print), 1937-4143 (electronic). URL <http://dlib.computer.org/mi/books/mi1999/pdf/m4023.pdf>; <http://www.computer.org/micro/mi1999/m4023abs.htm>. Presented at Cool Chips II, Kyoto, Japan, April 26–27, 1999.

**Borkar:1999:IST**

[Bor99b] Shekhar Borkar. Invited speech 4: Technology scaling and design challenges. In Anonymous [Ano99], page ??

- [CGMV99] **Choquette:1999:HPR** Jack Choquette, Mayank Gupta, Dominic McCarthy, and Jack Veenstra. High-performance RISC microprocessors. *IEEE Micro*, 19(4):48–55, July/August 1999. CODEN IEMIDZ. ISSN 0272-1732 (print), 1937-4143 (electronic). URL <http://dlib.computer.org/mi/books/mi1999/pdf/m4048.pdf>; <http://www.computer.org/micro/mi1999/m4048abs.htm>. Presented at Cool Chips II, Kyoto, Japan, April 26–27, 1999.
- [CK11a] **Court:2011:LDMb** C. A. Court and P. H. J. Kelly. Loop-directed mothballing: Power-gating execution units using fast analysis of inner loops. In *2011 IEEE COOL Chips XIV: Yokohama Joho Bunka Center, Yokohama, Japan, April 20–22, 2011* [IEE11], pages 1–3. CODEN IRELAO. ISBN 1-61284-884-2. ISSN 0367-9950. LCCN ????. URL <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=5890925>. IEEE Catalog Number CFP11COL-ART.
- [CK11b] **Court:2011:LDMa** Craig A. Court and Paul H. J. Kelly. Loop-directed mothballing: Power gating execution units using runtime loop analysis. *IEEE Micro*, 31(6):29–38, November/December 2011. CODEN IEMIDZ. ISSN 0272-1732 (print), 1937-4143 (electronic).
- [Col99] **Collins:1999:IGE** Rich Collins. Implementation of the global embedded processor debug interface standard for the MCORE architecture. In Anonymous [Ano99], page ??
- [Cor04] **Cornish:2004:EOM** John Cornish. Energy optimisation in multi-core systems. In Anonymous [Ano04], page ?? ISBN ????. LCCN ????
- [CPK+03] **Choi:2003:MLC** Pilsoon Choi, Hyungchul Park, Sohyeong Kim, Ilku Nam, Sungchung Park, Taewook Kim, Sangho Shin, Seokjong Park, Myungsoo Kim, Kyucheol Kang, Yeonwo Ku, Hyokjae Choi, Sook Min Park, and Kwyro Lee. MICROS: a low-cost and low-power 2.4GHz CMOS radio chips for ubiquitous network application. In Anonymous [Ano03], page ?? ISBN ????. LCCN ????
- [CUH+11] **Chacin:2011:CIL** M. Chacin, H. Uchida, M. Hagimoto, T. Miyazaki, T. Ohkawa, R. Ikeno, Y. Matsumoto, F. Imura, M. Suzuki, K. Kikuchi, H. Nakagawa, and M. Aoyagi. COOL interconnect low power interconnection technology for scalable 3D LSI design. In *2011 IEEE COOL Chips XIV: Yokohama Joho Bunka Center, Yokohama, Japan, April 20–22, 2011* [IEE11], pages 1–3. CODEN IRELAO. ISBN 1-61284-884-2. ISSN 0367-9950.

- LCCN ????. URL <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=5890921>. [FHR99] IEEE Catalog Number CFP11COL-1 ART.
- [Dit00] David R. Ditzel. Keynote presentation: Transmeta's Crusoe: a low-power x86-compatible microprocessor built with software. In Anonymous [Ano00], page ??
- [DSET<sup>+</sup>03] H. Du, M. Sanchez-Elez, N. Tabrizi, N. Bagherzadeh, and M. Fernandez. Late submission: MorphoSys: a reconfigurable architecture optimized for ray tracing. In Anonymous [Ano03], page ?? ISBN ????? LCCN ????? [Fly99]
- [EK04] Masato Edahiro and Shorin Kyo. Chip multiprocessor. In Anonymous [Ano04], page ?? ISBN ????? LCCN ????? [Fur03a]
- [ERG03] Ali El Kateeb, Paul Richardson, and Mukul Gadde. A data stream distributor chip for high-speed routers design: a reconfigurable approach. In Anonymous [Ano03], page ?? ISBN ????? LCCN ????? [Fur03b]
- [F<sup>+</sup>99] Taro Fujii et al. A 0.25  $\mu\text{m}$  CMOS, 5.1 M-transistor, dynamically reconfigurable logic engine(DRLE). In Anonymous [Ano99], page ??
- Flynn:1999:DSM**
- Michael J. Flynn, Patrick Hung, and Kevin W. Rudd. Deep-submicron microprocessor design issues. *IEEE Micro*, 19(4):11–22, July/August 1999. CODEN IEMIDZ. ISSN 0272-1732 (print), 1937-4143 (electronic). URL <http://dlib.computer.org/mi/books/mi1999/pdf/m4011.pdf>; <http://www.computer.org/micro/mi1999/m4011abs.htm>. Presented at Cool Chips II, Kyoto, Japan, April 26–27, 1999.
- Flynn:1999:KSB**
- Michael Flynn. Keynote speech: Basic issues in processor architecture in the era of deep submicron technology. In Anonymous [Ano99], page ??
- Furber:2003:IAD**
- Steve Furber. An introduction to asynchronous design. In Anonymous [Ano03], page ?? ISBN ????? LCCN ?????
- Furber:2003:IPA**
- Steve Furber. Invited presentation: Asynchronous processors and on-chip interconnect. In Anonymous [Ano03], page ?? ISBN ????? LCCN ?????
- Gonzales:1999:MRA**
- David Ruimy Gonzales. Micro-RISC architecture for the wireless market. *IEEE Micro*, 19(4):30–37, July/August 1999. CODEN IEMIDZ. ISSN 0272-1732 (print), 1937-4143

- (electronic). URL <http://dlib.computer.org/mi/books/mi1999/pdf/m4030.pdf>; <http://www.computer.org/micro/mi1999/m4030abs.htm>. Presented at Cool Chips II, Kyoto, Japan, April 26–27, 1999.
- Gonzales:2000:MAI**
- [Gon00] David Ruimy Gonzales. MCORE architecture implements real-time debug port based on Nexus Consortium specification. In Anonymous [Ano00], page ??
- Heeb:2000:IPN**
- [Hee00] Jay Heeb. Invited presentation 1: Next generation Intel StrongARM technology. In Anonymous [Ano00], page ??
- Henriksson:2000:PCP**
- [Hen00] Tomas Henriksson. Poster 2: Configurable port processor increases flexibility in the protocol processing area. In Anonymous [Ano00], page ??
- Hori:2009:ADV**
- [HHNK09] Yuichi Hori, Yuya Hanai, Jun Nishimura, and Tadahiro Kuroda. Architecture design of versatile recognition processor for SensorNet applications. *IEEE Micro*, 29(6):44–57, November/December 2009. CODEN IEMIDZ. ISSN 0272-1732 (print), 1937-4143 (electronic).
- Hayakawa:2003:LPH**
- [HOY<sup>+</sup>03] Miki Hayakawa, Takashi Okada, Yutaka Yoshida, Takaaki Suzuki, Motoki Uehara, Norio Nakagawa, Osamu Nishii, and Kunio Uchiyama. Low-power and highly functional soC solution for telematics applications. In Anonymous [Ano03], page ?? ISBN ??? LCCN ????
- Hotta:2003:MCP**
- [HSB<sup>+</sup>03] Yoshihiko Hotta, Mitsuhsa Sato, Taisuke Boku, Daisuke Takahashi, and Chikafumi Takahashi. Measurement and characterization of power consumption of microprocessors for power-aware computing. In Anonymous [Ano03], page ?? ISBN ??? LCCN ????
- Inoue:1999:MLP**
- [I<sup>+</sup>99] Hiroaki Inoue et al. MBP-light: a processor for management of the distributed shared memory on JUMP-1. In Anonymous [Ano99], page ??
- Ikeda:2009:GEI**
- [IA09] Makoto Ikeda and Fumio Arakawa. Guest Editors' introduction: Cool Chips. *IEEE Micro*, 29(6): 5–6, November/December 2009. CODEN IEMIDZ. ISSN 0272-1732 (print), 1937-4143 (electronic).
- Ikeda:2011:CC**
- [IA11] Makoto Ikeda and Fumio Arakawa. Cool chips. *IEEE Micro*, 31(6): 4–5, November/December 2011. CODEN IEMIDZ. ISSN 0272-1732 (print), 1937-4143 (electronic).

- Ikeda:2013:CCG**
- [IA13] Makoto Ikeda and Fumio Arakawa. [IKM00] Cool chips [guest editors' introduction]. *IEEE Micro*, 33(6):4–5, November/December 2013. CODEN IEMIDZ. ISSN 0272-1732.
- Iwata:2003:APM**
- [IAK<sup>+</sup>03] Kenichi Iwata, Kazushi Akie, Yukifumi Kobayashi, Hiroshi Ueda, Masaki Nobori, Masaru Hase, Hiroshi Hatae, Hiromi Watanabe, Yutaka Funabashi, Kazuyoshi Koga, Shoichi Kamae, Ken Tatezawa, Koji Yamada, Takuichiro Nakazawa, and Ikuya Kawasaki. An application processor with MPEG-4 accelerator for 3G mobile videophones. In Anonymous [Ano03], page ?? ISBN ??? LCCN ????
- IEEE:2011:ICC**
- [IEE11] IEEE. *2011 IEEE COOL Chips XIV: Yokohama Joho Bunka Center, Yokohama, Japan, April 20–22, 2011*. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2011. ISBN 1-61284-884-2. ??? pp. LCCN ??? URL <http://ieeexplore.ieee.org/servlet/opac?punumber=5871805>. IEEE Catalog Number CFP11COL-ART.
- Ikeda:1999:SMVa**
- [Ike99] Mitsuo Ikeda. SuperENC: MPEG-2 video encoder LSI based on three-layer cooperative architecture. In Anonymous [Ano99], page ??
- Inoue:2000:PCM**
- Koji Inoue, Koji Kai, and Kazuaki Murakami. Poster 6: An on-chip memory-path architecture on merged DRAM/logic LSIs for high-performance/low-energy consumption. In Anonymous [Ano00], page ??
- Ikeda:1999:SMVb**
- [IKN<sup>+</sup>99] Mitsuo Ikeda, Toshio Kondo, Koyo Nitta, Kazuhito Suguri, Takeshi Yoshitome, Toshihiro Minami, Hiroe Iwasaki, Katsuyuki Ochiai, Jiro Naganuma, Makoto Endo, Yutaka Tashiro, Hiroshi Watanabe, Naoki Kobayashi, Tsuneo Okubo, Takeshi Ogura, and Ryota Kasai. SuperEnc: MPEG-2 video encoder chip. *IEEE Micro*, 19(4):56–65, July/August 1999. CODEN IEMIDZ. ISSN 0272-1732 (print), 1937-4143 (electronic). URL <http://dlib.computer.org/mi/books/mi1999/pdf/m4056.pdf>; <http://www.computer.org/micro/mi1999/m4056abs.htm>. Presented at Cool Chips II, Kyoto, Japan, April 26–27, 1999.
- Ito:2003:DRL**
- [IKN<sup>+</sup>03] Hideyuki Ito, Ryusuke Konishi, Hiroshi Nakada, Hideyuki Tsuboi, and Akira Nagoya. Dynamically reconfigurable logic LSI designed as fully asynchronous system – PCA-2. In Anonymous [Ano03], page ?? ISBN ??? LCCN ????



- [IMD<sup>+</sup>00] Shuhei Iwade, Kazuaki Murakami, David R. Ditzel, Jay Heeb, and Satoshi Matsuoka. Panel discussion. In Anonymous [Ano00], page ??
- [IS03] Yoshihiro Iida and Naohiko Shimizu. A PDP-11 compatible 16-bit embedded processor core for programmable chip. In Anonymous [Ano03], page ?? ISBN ??? LCCN ???
- [Isa99] Masazumi Isaka. A single-chip Voice over Internet Protocol LSI. In Anonymous [Ano99], page ??
- [J<sup>+</sup>99] Nam-Kyu Jung et al. Design of self-testable dual-port embedded memory. In Anonymous [Ano99], page ??
- [JH03] Hwi-Sung Jung and Soo-Wan Hong. Low power system-on-a-chip for hybrid GPS baseband. In Anonymous [Ano03], page ?? ISBN ??? LCCN ???
- [JPJ<sup>+</sup>03] Cheol-Ho Jeong, Woo-Chan Park, Jong-Chul Jeong, Hyun-Jae Woo, Kil-Whan Lee, Won-Jong Lee, Il-San Kim, Seung-Gi Lee, Jae-Hyun Kim, Tack-Don Han, and Moon-Key Lee. EmDavid: an embedded 3D graphic accelerator for mobile devices.
- In Anonymous [Ano03], page ?? ISBN ??? LCCN ???
- [K<sup>+</sup>99a] Hong-Kyu Kim et al. An efficient coprocessor interface scheme in CalmRISC. In Anonymous [Ano99], page ??
- [K<sup>+</sup>99b] Ryotaro Kobayashi et al. A cost-effective branch target buffer with a two-level table organization. In Anonymous [Ano99], page ??
- [KII09] Takashi Komuro, Atsushi Iwashita, and Masatoshi Ishikawa. A QVGA-size pixel-parallel image processor for 1,000-fps vision. *IEEE Micro*, 29(6):58–67, November/December 2009. CODEN IEMIDZ. ISSN 0272-1732 (print), 1937-4143 (electronic).
- [KIM<sup>+</sup>09] Motoki Kimura, Kenichi Iwata, Seiji Mochizuki, Hiroshi Ueda, Masakazu Ehama, and Hiromi Watanabe. A full HD multi-standard video codec for mobile applications. *IEEE Micro*, 29(6):18–27, November/December 2009. CODEN IEMIDZ. ISSN 0272-1732 (print), 1937-4143 (electronic).
- [Kiy00] Tokuzo Kiyohara. Media core processor for HD-TV application (MCP2). In Anonymous [Ano00], page ??

- Kim:2009:RTO**
- [KKL<sup>+</sup>09] Joo-Young Kim, Minsu Kim, Seungjin Lee, Jinwook Oh, Sejong Oh, and Hoi-Jun Yoo. Real-time object recognition with neuro-fuzzy controlled workload-aware task pipelining. *IEEE Micro*, 29 (6):28–43, November/December 2009. CODEN IEMIDZ. ISSN 0272-1732 (print), 1937-4143 (electronic).
- Kim:2000:FDP**
- [KLCK00] Seung-Geun Kim, Youngkou Lee, Sungsoo Choi, and Kiseon Kim. Fully digital preambleless 40Mbps QPSK demodulator for burst transmission. In Anonymous [Ano00], page ??
- Kwon:2000:FGA**
- [KLI<sup>+</sup>00] Young-Su Kwon, Jun-Hee Lee, Yeon-Ho Im, Sung-Jae Byun, Young-Wook Jeon, Sang-Joon Nam, Byoung-Woon Kim, and Chong-Min Kyung. FGA: Geometry acceleration system with VLIW processor in 3D graphics. In Anonymous [Ano00], page ??
- Kobayashi:1999:LPD**
- [Kob99] Yoshinao Kobayashi. A low power design methodology for large-scale ASICs. In Anonymous [Ano99], page ??
- Kohno:2003:IPA**
- [Koh03] Ryuji Kohno. Invited presentation 2: Anticipation of research and business in ultra wide-band (UWB) wireless systems.
- Kawakami:2003:FFD**
- [KOK<sup>+</sup>03] Kentaro Kawakami, Hideo Ohira, Miwako Kanamori, Masayuki Miyama, and Masahiko Yoshimoto. A feed-forward dynamic voltage control algorithm for low power/high quality MPEG4 on multi-regulated voltage CPU. In Anonymous [Ano03], page ?? ISBN ??? LCCN ????
- Kabadi:2003:BBA**
- [KP03] Mohan G. Kabadi and Ranjani Parthasarathi. Block-based alignment: a mechanism to reduce the tag comparisons for low power I-cache. In Anonymous [Ano03], page ?? ISBN ??? LCCN ????
- Kim:2000:HPV**
- [KSH<sup>+</sup>00] Jeong-Min Kim, Yun-Su Shin, In-Gu Hwang, Kyu-Myoung Lee, Kyung Soo Oh, Kwang-Sun Lee, Sang-Il Han, and Soo-Ik Chae. High-performance video-phone chip with dual multimedia VLIW processor cores. In Anonymous [Ano00], page ??
- Kyung:1999:ISS**
- [Kyu99] C.-M. Kyung. Invited speech 1: In-system design verification of processors. In Anonymous [Ano99], page ??
- Larri:1999:ALP**
- [Lar99] Guy Larri. ARM920T low-power high-performance system-on-A-chip processor. In Anonymous [Ano99], page ??
- In Anonymous [Ano03], page ?? ISBN ??? LCCN ????

- [LLC03] **Lee:2003:DAE**  
 Je-Hoon Lee, Won-Chul Lee, and Kyoung-Rok Cho. Design of the asynchronous embedded controller with the ad-hoc control schemes and A8051. In Anonymous [Ano03], page ?? ISBN ??? LCCN ????
- [LMW03] **Lee:2003:NCD**  
 Seunghun Lee, Gyu Moon, and Jae-Kyung Wee. A novel clock distribution scheme having a PVT invariance and asymptotically inherent zero skew for high density and high performance digital system. In Anonymous [Ano03], page ?? ISBN ??? LCCN ????
- [MAA<sup>+</sup>11] **Motomura:2011:PDI**  
 Masato Motomura, Takafumi Aoki, Toru Awashima, Toru Baji, and Masaaki Ishikawa. Panel discussions: Impact on society by fusion and harmony of mobile devices, servers, and networks — Their direction of evolutions and optimal roles. In *2011 IEEE COOL Chips XIV: Yokohama Joho Bunka Center, Yokohama, Japan, April 20–22, 2011* [IEE11], pages 1–2. [Mat03] CODEN IRELAO. ISBN 1-61284-884-2. ISSN 0367-9950. LCCN ??? URL <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=5890933> [MAY01] IEEE Catalog Number CFP11COL-1 ART.
- [Mac00] **Machida:2000:LPM**  
 Noriaki Machida. A low power MPEG-4 video/audio codec LSI with 16Mbit embedded DRAM. In Anonymous [Ano00], page ??
- [Mak00] **Makimoto:2000:KPC**  
 Tsugio Makimoto. Keynote presentation: Cooler the better — new directions in the nomadic age. In Anonymous [Ano00], page ??
- [Mas00] **Masuda:2000:CR**  
 Eiji Masuda. Closing remarks. In Anonymous [Ano00], page ??
- [Mat00] **Matsuzawa:2000:IPS**  
 Akira Matsuzawa. Invited presentation 2: System on a chip and low power technologies for digital consumer electronics. In Anonymous [Ano00], page ??
- [Mat03] **Matsuyama:2003:VHP**  
 Hideki Matsuyama. V850E2: The high performance CPU platform which realize various application systems with flexible memory configurations. In Anonymous [Ano03], page ?? ISBN ??? LCCN ????
- [Mat04] **Matsuoka:2004:GC**  
 Satoshi Matsuoka. Grid computing. In Anonymous [Ano04], page ?? ISBN ??? LCCN ????
- [Mak01] **Makimoto:2001:CBN**  
 Tsugio Makimoto, Kazuhiko Eguchi, and Mitsugu Yoneyama. The cooler the better: New directions in the nomadic age. *Computer*, 34(4):38–42, April 2001. CODEN CPTRB4. ISSN

- 0018-9162 (print), 1558-0814 (electronic). URL <http://dlib.computer.org/co/books/co2001/pdf/r4038.pdf>; <http://www.computer.org/computer/co2001/r4038abs.htm>.
- Mitake:1999:PAE**
- [Mit99] Daisuke Mitake. A processor architecture and evaluation which correspond to the deviation of the memory latency. In Anonymous [Ano99], page ??
- Miyazaki:2003:LPD**
- [Miy03] Masayuki Miyazaki. Low-power design of system LSI considering threshold voltage and body bias. Part I: Theoretical analysis of LSI performance. Part II: Schematic implementation. Part III: Future projection of low-power system. In Anonymous [Ano03], page ?? ISBN ??? LCCN ???
- Miura:2013:SHM**
- [MKT<sup>+</sup>13] Noriyuki Miura, Yusuke Koizumi, Yasuhiro Take, Hiroki Matsutani, Tadahiro Kuroda, Hideharu Amano, Ryuichi Sakamoto, Mitaro Namiki, Kimiyoshi Usami, Masaaki Kondo, and Hiroshi Nakamura. A scalable 3D heterogeneous multicore with an inductive ThruChip interface. *IEEE Micro*, 33(6):6–15, November/December 2013. CODEN IEMIDZ. ISSN 0272-1732.
- Matsuo:2003:IPC**
- [MOT<sup>+</sup>03a] Yoshihiro Matsuo, Shigeyuki Okada, Kazuhiko Taketa, Tatsushi Ohyama, Yuh Matsuda, Tsugio Mori, Shin'ichiro Okada, Tsuyoshi Watanabe, Tatsuya Ichikawa Yuji Yamada, Hideki Yamauchi, and Yoshifumi Matsushita. An image processor capable of block-noise-free JPEG2000 compression with 30 frames/s for digital camera applications. In Anonymous [Ano03], page ?? ISBN ??? LCCN ???
- Miyazaki:2003:LPS**
- [MOT<sup>+</sup>03b] Masayuki Miyazaki, Goichi Ono, Hidetoshi Tanaka, Norio Ohkubo, and Takayuki Kawahara. A low-power system solution aimed at a chip multi-processor. In Anonymous [Ano03], page ?? ISBN ??? LCCN ???
- Munakata:2003:IFL**
- [MS03] Toshinori Munakata and Sudeshna Sinha. Implementation of fundamental logical gates by 1-D chaotic elements. In Anonymous [Ano03], page ?? ISBN ??? LCCN ???
- Misaka:2003:FVC**
- [MTA<sup>+</sup>03] Satoshi Misaka, Keisuke Toyama, Toshiyuki Aritsuka, Kunio Uchiyama, Kazuo Aisaka, Hiroshi Kawaguchi, and Takayasu Sakurai. Frequency-voltage cooperative power reduction for multi-tasking multimedia applications. In Anonymous [Ano03], page ?? ISBN ??? LCCN ???
- Matsushita:2000:MSC**
- [MTN<sup>+</sup>00] Satoshi Matsushita, Sunao Torii, Masahiko Nomura, Toshiaki Inoue, Atsufumi Shibayama,

- Sachiko Shimada, Taku Osawa, Hiroaki Inoue, Kouichiro Minami, Junji Sakai, Yoshiyuki Ito, Yuichi Nakamura, Masato Edahiro, Naoki Nishi, and Masakazu Yamashina. Merlot: a single-chip tightly coupled four-way multi-thread processor. In Anonymous [Ano00], page ??
- [Nak99] Tadao Nakamura. Guest Editor's introduction: Introducing cool chips. *IEEE Micro*, 19(4):9–10, July/August 1999. CODEN IEMIDZ. ISSN 0272-1732 (print), 1937-4143 (electronic). URL <http://dlib.computer.org/mi/books/mi1999/pdf/m4009.pdf>.
- [Nak00a] Kazufumi Nakagami. Poster 8: MIPS synthesizable processor core future product roadmap/development platform. In Anonymous [Ano00], page ??
- [Nak00b] Tadao Nakamura. Cool Chips III. *IEEE Micro*, 20(6):83–84, November/December 2000. CODEN IEMIDZ. ISSN 0272-1732 (print), 1937-4143 (electronic). URL <http://dlib.computer.org/mi/books/mi2000/pdf/m6083.pdf>; <http://www.computer.org/micro/mi2000/m6083abs.htm>.
- [Nam99] Sang-Joon Nam. VLIW geometry processor for 3D graphics acceleration. In Anonymous [Ano99], page ??
- [Nan03] Takashi Nanya. A fusion of synchronous and asynchronous design styles. In Anonymous [Ano03], page ?? ISBN ???? LCCN ???? **Nanya:2003:FSA**
- [Nis03] Naoki Nishi. Closing remarks. In Anonymous [Ano03], page ?? ISBN ???? LCCN ???? **Nishi:2003:CR**
- [NKI<sup>+</sup>09] Tohru Nojiri, Yuki Kondo, Naohiko Irie, Masayuki Ito, Hajime Sasaki, and Hideo Maejima. Domain partitioning technology for embedded multicore processors. *IEEE Micro*, 29(6):7–17, November/December 2009. CODEN IEMIDZ. ISSN 0272-1732 (print), 1937-4143 (electronic). **Nojiri:2009:DPT**
- [NKT<sup>+</sup>11] D. Nakano, Y. Kohda, K. Takano, T. Yamane, N. Ohba, and Y. Katayama. Multi-Gbps 60-GHz single-carrier system using a low-power coherent detection technique. In *2011 IEEE COOL Chips XIV: Yokohama Joho Bunka Center, Yokohama, Japan, April 20–22, 2011* [IEE11], pages 1–3. CODEN IRELAO. ISBN 1-61284-884-2. ISSN 0367-9950. LCCN ???? URL <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=5890929>. IEEE Catalog Number CFP11COL-ART.
- Nakamura:1999:GEI**
- Nakagami:2000:PMS**
- Nakamura:2000:CCI**
- Nam:1999:VGP**

- Nakamura:2000:WOR**
- [NKYT00] Tadao Nakamura, Akira Kubota, Yasuhiko Yasuda, and Josep Torrellas. Welcome and opening remarks. In Anonymous [Ano00], page ??
- Ninomiya:2003:SCS**
- [NOH<sup>+</sup>03] Kazuki Ninomiya, Shinji Ozaki, Katsumi Hoashi, Ryuji Matsuura, Hideshi Nishida, Masaaki Harada, and Toshiyuki Ochiai. Single chip system LSI for digital HDTV broadcast receivers. In Anonymous [Ano03], page ?? ISBN ????? LCCN ????
- Nunomura:2003:EMB**
- [NSI<sup>+</sup>03] Yasuhiro Nunomura, Hisakazu Sato, Niichi Itoh, Koji Nii, Kanako Yoshida, Chikako Nakanishi, Hironobu Ito, Jingo Nakanishi, Hidehiro Takata, Yasunobu Nakase, Hiroshi Makino, Akira Yamada, Takahiko Arakawa, Tsutomu Yoshihara, and Shuhei Iwade. Evaluation of a microcontroller in body-tied SOI technology. In Anonymous [Ano03], page ?? ISBN ????? LCCN ????
- Nishi:2000:PRS**
- [NTK<sup>+</sup>00a] Hiroaki Nishi, Koji Tasho, Tomohiro Kudoh, Junji Yamamoto, and Hideharu Amano. Poster 7: RHiNET-1/SW: an LSI switch for a local area system network. In Anonymous [Ano00], page ??
- Nishi:2000:RSL**
- [NTK<sup>+</sup>00b] Hiroaki Nishi, Koji Tasho, Tomohiro Kudoh, Junji Yamamoto, and Hideharu Amano. RHiNET-1/SW: an LSI switch for a local area system network. In Anonymous [Ano00], page ??
- Ozaki:2011:SSL**
- [OAN<sup>+</sup>11] N. Ozaki, H. Amano, H. Nakamura, K. Usami, M. Namiki, and M. Kondo. SLD-1 (Silent Large Datapath): a ultra low power reconfigurable accelerator. In *2011 IEEE COOL Chips XIV: Yokohama Joho Bunka Center, Yokohama, Japan, April 20-22, 2011* [IEE11], pages 1-3. CODEN IRELAO. ISBN 1-61284-884-2. ISSN 0367-9950. LCCN ????. URL <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=5890918>. IEEE Catalog Number CFP11COL-ART.
- Otani:2011:GDM**
- [OKN<sup>+</sup>11a] S. Otani, H. Kondo, I. Nonomura, A. Ikeya, M. Uemura, K. Asahina, K. Arimoto, S. Miura, T. Hanawa, T. Boku, and M. Sato. An 80 Gbps dependable multi-core communication SoC with PCI express I/F and intelligent interrupt controller. In *2011 IEEE COOL Chips XIV: Yokohama Joho Bunka Center, Yokohama, Japan, April 20-22, 2011* [IEE11], pages 1-3. CODEN IRELAO. ISBN 1-61284-884-2. ISSN 0367-9950. LCCN ????. URL <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=5890920>. IEEE Catalog Number CFP11COL-ART.

**Otani:2011:PMC**

- [OKN<sup>+</sup>11b] Sugako Otani, Hiroyuki Kondo, Itaru Nonomura, Toshihiro Hanawa, Shin'ichi Miura, and Taisuke Boku. Peach: a multicore communication system on chip with PCI express. *IEEE Micro*, 31(6):39–50, November/December 2011. CODEN IEMIDZ. ISSN 0272-1732 (print), 1937-4143 (electronic).

**Okano:2000:WVE**

- [OSS<sup>+</sup>00] Hiroshi Okano, Atsuhiko Suga, Takao Sukemura, Hiromasa Takahashi, Hideo Miyake, Yasuki Nakamura, Yoshimasa Takebe, Yoshio Hirose, Michihide Kimura, Shin ichiroh Tago, Hitoshi Yoda, Yasuhiro Yamazaki, Masayuki Tsuji, Taizo Satoh, Atsushi Kakurai, and Tomoyuki Katayama. A 350MHz 5.6GOPS/1.4GFLOPS 4-way VLIW embedded microprocessor. In Anonymous [Ano00], page ??

**Ozaki:2011:CMA**

- [OYS<sup>+</sup>11] Nobuaki Ozaki, Yoshihiro Yasuda, Yoshiki Saito, Daisuke Ikebuchi, Masayuki Kimura, Hideharu Amano, Hiroshi Nakamura, Kimiyoshi Usami, Mitaro Namiki, and Masaaki Kondo. Cool mega-arrays: Ultralow-power reconfigurable accelerator chips. *IEEE Micro*, 31(6):6–18, November/December 2011. CODEN IEMIDZ. ISSN 0272-1732 (print), 1937-4143 (electronic).

**Park:2011:LPS**

- [PKKK11] Daejin Park, Tag Gon Kim, Changmin Kim, and Sungho Kwak. A low-power sync processor with a floating-point timer and universal edge tracer for 3DTV active shutter glasses. In *2011 IEEE COOL Chips XIV: Yokohama Joho Bunka Center, Yokohama, Japan, April 20–22, 2011* [IEE11], pages 1–3. CODEN IRELAO. ISBN 1-61284-884-2. ISSN 0367-9950. LCCN ????. URL <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=5890924>. IEEE Catalog Number CFP11COL-ART.

**Park:2000:CCS**

- [PLL<sup>+</sup>00] Gi-Ho Park, Kil-Whan Lee, Jang-Soo Lee, Jung-Hoon Lee, Tack-Don Han, Shin-Dug Kim, Moon-Key Lee, Yong-Chun Kim, Seh-Woong Jeong, Hyung-Lae Roh, and Kwang-Yup Lee. Cooperative cache system: a low-power cache structure for embedded processor. In Anonymous [Ano00], page ??

**Ryum:1999:DLP**

- [R<sup>+</sup>99] Beom Seon Ryum et al. A design of low power 16-bit ALU. In Anonymous [Ano99], page ??

**Rabaey:2003:KPU**

- [Rab03] Jan M. Rabaey. Keynote presentation: Ultra-low power computation and communication enables ambient intelligence. In Anonymous [Ano03], page ?? ISBN ????. LCCN ????

- [Sak03] Yukio Sakamoto. Keynote presentation 2: Rebirth of Japanese DRAM. In Anonymous [Ano03], page ?? ISBN ??? LCCN ???
- [Sat04] Tomoyoshi Sato. Untitled. In Anonymous [Ano04], page ?? ISBN ??? LCCN ???
- [Sch03] Herman Schmit. Invited presentation 3./ PipeRench: Energy efficient reconfigurable computing with a clean computational model. In Anonymous [Ano03], page ?? ISBN ??? LCCN ???
- [Shi99] K. Shimohara. Invited speech 2: Evolutionary systems for brain communications. In Anonymous [Ano99], pages 37–50.
- [SHM<sup>+</sup>03] Mamoru Sakamoto, Masato Hagiwara, Takahiro Matsuo, Akira Yamada, and Shuhei Iwade. Just in time compiler for M32R processors. In Anonymous [Ano03], page ?? ISBN ??? LCCN ???
- [SKI<sup>+</sup>00] Junji Sakai, Masaki Kondo, Hiroyoshi Iizuka, Koji Yoshida, Masayoshi Kai, Akihisa Ikeno, Kenji Suzuki, Satoshi Kato, Masaya Obata, Sunao Torii, Satoshi Matsushita, Naoki Nishi, and Masato Edahiro. Poster 3: Software environment for single-chip multi-processor Merlot (MP98 Ver.1). In Anonymous [Ano00], page ??
- [SMH<sup>+</sup>03] Herman Schmit, Kazuaki Murakami, Takashi Hashimoto, Takashi Miyamori, and Fumio Arakawa. Panel discussion: What is the future COOL and high-performance architecture? In Anonymous [Ano03], page ?? ISBN ??? LCCN ???
- [SMK<sup>+</sup>00a] Hiroshi Sasaki, Hitoshi Maruyama, Masaaki Kuwata, Hideaki Tsukioka, Nobuyoshi, Shoji, Hiroaki Kobayashi, and Tadao Nakamura. Poster 4: Reconfigurable hardware and its software environment for direct execution of dataflow graphs. In Anonymous [Ano00], page ??
- [SMK<sup>+</sup>00b] Hiroshi Sasaki, Hitoshi Maruyama, Masaaki Kuwata, Hideaki Tsukioka, Nobuyoshi Shoji, Hiroaki Kobayashi, and Tadao Nakamura. Reconfigurable hardware for direct mapping of dataflow graphs. In Anonymous [Ano00], page ??
- [SMS<sup>+</sup>00] Hiroshi Segawa, Yoshinori Matsuura, Stefan Scozniovsky, Cheng Ling King, Shu Murayama, Tetsuro Wada, Ayako Harada, Satoshi Kumaki, Tetsuya Matsumura, Ken ichi Asano, and Toyohiko Yoshida. Encoding with a 162MHz media-processor for a

**Sakamoto:2003:KPR****Sato:2004:U****Schmit:2003:IPP****Shimohara:1999:ISE****Sakamoto:2003:JTC****Sakai:2000:PSE****Schmit:2003:PDW****Sasaki:2000:PRH****Sasaki:2000:RHD****Segawa:2000:EMP**



single-chip encoder. In Anonymous [Ano00], page ??

**Shimizu:2003:HPP**

- [SNO<sup>+</sup>03] Yasuyuki Shimizu, Kyuotaro Nakamura, Atsuhiko Okada, Masaaki Shiotani, Yoshiki Kobayashi, Katsutoshi Yoshimura, and Satoshi Inoue. High performance powertrain microcontroller. In Anonymous [Ano03], page ?? ISBN ???? LCCN ???? [T<sup>+</sup>99a]

**Sutoh:1999:HPP**

- [Sut99] Hiroki Sutoh. A high-performance public key cryptography coprocessor for super multi-purpose smart card. In Anonymous [Ano99], page ?? [T<sup>+</sup>99b]

**Shimamoto:2011:ACT**

- [SYKM11] Hiroshi Shimamoto, Takayuki Yamashita, Misao Kubota, and Hirotaka Maruyama. Advanced camera technologies for broadcasting. *IEEE Micro*, 31(6):51–57, November/December 2011. CODEN IEMIDZ. ISSN 0272-1732 (print), 1937-4143 (electronic). [TAD<sup>+</sup>00]

**Suzuki:2011:HTL**

- [SYY<sup>+</sup>11] Tomoya Suzuki, Hideki Yamada, Toshiyuki Yamagishi, Daisuke Takeda, Koji Horisaki, Toshio Fujisawa, Yasuo Unekawa, Tom Vander Aa, and Liesbet Van der Perre. High-throughput, low-power software-defined radio using reconfigurable processors. *IEEE Micro*, 31(6):19–28, November/December 2011. CO-

DEN IEMIDZ. ISSN 0272-1732 (print), 1937-4143 (electronic).

**Takano:1999:CAC**

Kohji Takano et al. A cryptographic accelerator card with small fast low-power RSA engines. In Anonymous [Ano99], page ??

**Takata:1999:IDC**

Hidehiro Takata et al. Instruction decode and clock skew control for a 2.3V, 300MHz multimedia processor. In Anonymous [Ano99], page ??

**Takahashi:2000:PCD**

Osamu Takahashi, Naoaki Aoki, Sang H. Dhong, Peter Hofstee, Nobuo Kojima, Kyung T. Lee, Kevin Nowka, Steve Posluszny, and Joel Silberman. Power considerations in dynamic circuits for a gigahertz microprocessor. In Anonymous [Ano00], page ??

**Tajima:2003:VHP**

Kuniyasu Tajima. VR7701: a high performance out-of-order superscalar microprocessor with integrated L2 cache and peripherals. In Anonymous [Ano03], page ?? ISBN ???? LCCN ???? [Taj03]

**Takahashi:1999:ISL**

Hiroshi Takahashi. Invited speech 3: Low power and high speed digital signal processor. In Anonymous [Ano99], page ?? [Tak99]

- Tan:2011:NML**
- [TDC<sup>+</sup>11] Xiao-Liang Tan, Anh-Tuan Do, Shou-Shun Chen, Kiat-Seng Yeo, and Zhi-Hui Kong. A new match line sensing technique in Content Addressable Memory. In *2011 IEEE COOL Chips XIV: Yokohama Joho Bunka Center, Yokohama, Japan, April 20–22, 2011* [IEE11], pages 1–3. CODEN IRELAO. ISBN 1-61284-884-2. ISSN 0367-9950. LCCN ????. URL <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=5890926>. IEEE Catalog Number CFP11COL-ART.
- Tsuchie:2003:SCM** [TSO00]
- [TFH<sup>+</sup>03] K. Tsuchie, T. Fujisawa, J. Hasegawa, T. Shiozawa, T. Fujita, K. Seki-Fukuda, T. Higashi, R. Bandai, N. Yoshida, K. Shinohara, T. Watanabe, H. Hatano, K. Noguchi, T. Saito, Y. Unekawa, and T. Aikawa. A single chip MAC/PHY processor for 5 GHz WLAN applications. In Anonymous [Ano03], page ?? ISBN ????. LCCN ????
- Tanino:2003:ECT**
- [TSA03] Asami Tanino, Toshinori Sato, and Itsujiro Arita. An evaluation of constructive timing violation via CSLA design. In Anonymous [Ano03], page ?? ISBN ????. LCCN ????
- Taki:2011:DSU**
- [TSI<sup>+</sup>11] D. Taki, T. Shiozawa, K. Ito, Y. Shiba, K. Horisaki, H. Kajihara, T. Yamagishi, M. Sekiya, A. Yamaga, T. Fujita, H. Hara, M. Kuwahara, T. Fujisawa, and Y. Unekawa. A 7 $\mu$ W deep-sleep, ultra low-power WLAN base-band LSI for mobile applications. In *2011 IEEE COOL Chips XIV: Yokohama Joho Bunka Center, Yokohama, Japan, April 20–22, 2011* [IEE11], pages 1–3. CODEN IRELAO. ISBN 1-61284-884-2. ISSN 0367-9950. LCCN ????. URL <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=5890931>. IEEE Catalog Number CFP11COL-ART.
- Takano:2000:PTH**
- Kohji Takano, Akashi Satoh, and Nobuyuki Ohba. Poster 5: TATSU — hardware accelerator for public-key cryptography using Montgomery method. In Anonymous [Ano00], page ??
- Takata:1999:DMM**
- [TWN<sup>+</sup>99] Hidehiro Takata, Tetsuya Watanabe, Tetsuo Nakajima, Takashi Takagaki, Hisakazu Sato, Atsushi Mohri, Akira Yamada, Toshiki Kanamoto, Yoshio Matsuda, Shuhei Iwade, and Yasutaka Horiba. The D30V/MPEG multimedia processor. *IEEE Micro*, 19(4):38–47, July/August 1999. CODEN IEMIDZ. ISSN 0272-1732 (print), 1937-4143 (electronic). URL <http://dlib.computer.org/mi/books/mi1999/pdf/m4038.pdf>; <http://www.computer.org/micro/mi1999/m4038abs.htm>. Presented at Cool Chips II, Kyoto, Japan, April 26–27, 1999.

- [Uch00] **Uchiyama:2000:SSA** Kunio Uchiyama. The SH-5/ST50: An advanced microprocessor core for networking and multimedia applications. In Anonymous [Ano00], page ??
- [Uss00] **Ussey:2000:CPP** Cary Ussey. Poster 1: Configurable processing platforms: Redefining SoC. In Anonymous [Ano00], page ??
- [VSPN03] **Venkateswaran:2003:LPC** N. Venkateswaran, V. Deepak Sarathi, J. Arun Padmanabhan, and Sunil Nataraj. A 90nm low power chip design for high performance DSP applications. In Anonymous [Ano03], page ?? ISBN ??? LCCN ???
- [WM03] **Watcharawitch:2003:MME** Panit Watcharawitch and Simon W. Moore. MulTEP: Multithreaded Embedded Processors. In Anonymous [Ano03], page ?? ISBN ??? LCCN ???
- [Y+99a] **Yamazaki:1999:RPP** Nobuyuki Yamazaki et al. Responsive processor for parallel/distributed real-time processing. In Anonymous [Ano99], page ??
- [Y+99b] **Yang:1999:EIB** Sun-Woong Yang et al. An efficient implementation of BIST based on IEEE 1149.1 for fixed point DSP processor. In Anonymous [Ano99], page ??
- [yC00] **Chiang:2000:KPS** Shang yi Chiang. Keynote presentation 3: Strategy in an IP era. In Anonymous [Ano00], page ??
- [yC01] **Chiang:2001:FDO** Shang yi Chiang. Foundries and the dawn of an Open IP era. *Computer*, 34(4):43–46, April 2001. CODEN CPTRB4. ISSN 0018-9162 (print), 1558-0814 (electronic). URL <http://dlib.computer.org/co/books/co2001/pdf/r4043.pdf>; <http://www.computer.org/computer/co2001/r4043abs.htm>.
- [YDKA03] **Yamada:2003:CPM** Yutaka Yamada, Katsuaki Deguchi, Naoto Kaneko, and Hideharu Amano. Core processor/multicontext device co-design. In Anonymous [Ano03], page ?? ISBN ??? LCCN ???
- [YHT+11] **Yoshikawa:2011:FSH** T. Yoshikawa, F. Hyuga, M. Tokunaga, Y. Yamada, and S. Asano. FlexGrip: a small and high-performance programmable hardware for highly sequential application. In *2011 IEEE COOL Chips XIV: Yokohama Joho Bunka Center, Yokohama, Japan, April 20–22, 2011* [IEE11], pages 1–3. CODEN IRELAO. ISBN 1-61284-884-2. ISSN 0367-9950. LCCN ??? URL <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=5890917>.

- IEEE Catalog Number CFP11COL-ART.
- Yamagata:2003:IMT**
- [YIA<sup>+</sup>03] Yuki Yamagata, Kenichi Ichino, Masayuki Arai, Satoshi Fukumoto, Kazuhiko Iwasaki, Masayuki Sato, Hiroyuki Itabashi, Takashi Murai, and Nobuyuki Otsuka. Implementation of memory tester consisting of SRAM-based reconfigurable cells. In Anonymous [Ano03], page ?? ISBN [ZJM<sup>+</sup>03] LCCN ????
- Yoshida:2013:SXF**
- [YMA<sup>+</sup>13] Toshio Yoshida, Takumi Maruyama, Yasunobu Akizuki, Ryuji Kan, Naohiro Kiyota, Kiyoshi Ikenishi, Shigeki Ito, Tomoyuki Watahiki, and Hiroshi Okano. Sparc64 X: Fujitsu's new-generation 16-core processor for Unix servers. *IEEE Micro*, 33(6):16–24, November/December 2013. CODEN IEMIDZ. ISSN 0272-1732. [Zuc04]
- Yoo:2000:MMD**
- [YOS00] Hyunjune Yoo, Soohwan Ong, and Myung H. Sunwoo. The MDSP (Multimedia DSP) chip for portable multimedia. In Anonymous [Ano00], page ??
- Yamada:2011:MWB**
- [YYS<sup>+</sup>11] H. Yamada, T. Yamagishi, T. Suzuki, K. Ito, K. Horisaki, T. V. Aa, T. Fujisawa, L. Van der Perre, and Y. Uekawa. A multimodal wireless baseband core using a coarse-grained dynamic reconfigurable processor. In *2011 IEEE COOL Chips XIV: Yokohama Joho Bunka Center, Yokohama, Japan, April 20–22, 2011* [IEE11], pages 1–3. CODEN IRELAO. ISBN 1-61284-884-2. ISSN 0367-9950. LCCN ????. URL <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=5890930>. IEEE Catalog Number CFP11COL-ART.
- Zhu:2003:HSL**
- Zhaomin Zhu, Koh Johguchi, Hans Juergen Mattausch, Tetsushi Koide, Tai Hirakawa, and Tetsuo Hironaka. A high-speed and low power hierarchical multiport cache. In Anonymous [Ano03], page ?? ISBN LCCN ????
- Zucker:2004:CCE**
- Daniel Zucker. COOL chips enable ubiquitous Web browsing. In Anonymous [Ano04], page ?? ISBN LCCN ????