Precise-IP™ Partner Cores

Processors & Microcontrollers

Vendor	IP Name	Datasheet
ARM	Cortex M1 Processor	HTML
Aeroflex-Gaisler	Aeroflex-Gaisler Leon3 Processor	HTML
CAST	16 / 32-bit Microprocessor	HTML
CAST	RISC 8051 – 12 x Intel 8051; Configurable	HTML
CAST	RISC 8051 - Entry point (no debugging)	HTML
IPextreme	FlexRay Communication Controller	HTML
EnSilica	16-bit ultra-compact, low-power CPU core	HTML
EnSilica	32-bit compact, low-power CPU	HTML
EnSilica	32-bit High performance CPU Core with cache	HTML
IPextreme	HCS08 – 8-bit CPU	HTML
IPextreme	Power Architecture e200z1 32-bit CPU	HTML
IPextreme	Power Architecture e200z6 32-bit CPU	HTML
IPextreme	V1 ColdFire 32-bit CPU	HTML
IPextreme	V2 ColdFire 32-bit CPU	HTML

Interfaces

Vendor	IP Name	Datasheet
CAST	10/100 Ethernet Media Access Controller	HTML
CAST	10/100/1000 Ethernet Media Access Controller	HTML
CAST	32-bit / 33 MHz Master/Target PCI Bus Target Interface	HTML
CAST	32-bit / 33 MHz Multi-function PCI Bus Target Interface	HTML
CAST	32-bit / 33 MHz Target PCI Bus Target Interface	HTML
CAST	32-bit / 33,66 MHz PCI Host-Bridge	HTML
CAST	64-bit / 66 MHz Master/Target PCI Bus Target Interface	HTML
CAST	64-bit / 66 MHz Target PCI Bus Target Interface	HTML
CAST	Digital Audio Interface	HTML
CAST	I2C Bus Controller - version 2.1 (High Speed)	HTML
CAST	I2C Bus Controller Master/Slave	HTML
CAST	Inter IC Sound Bus	HTML
CAST	PCI Express Endpoint Controller x1	HTML
CAST	PCI Express Endpoint Controller x1, x4	HTML
CAST	Universal Serial Bus 1.1 Device Controller (slave)	HTML
CAST	Universal Serial Bus 2.0 Device Controller (slave)	HTML
CAST	USB 2.0 On-The-Go - Multi Peripheral Device with DMA	HTML
CAST	USB 2.0 On-The-Go - Single Device	HTML
IPextreme	AMBA Peripheral Library	HTML
IPextreme	cJTAG 1149.7 TAP Controller	HTML
Innovative Logic	SuperSpeed USB3.0 Device Controller	HTML
Innovative Logic	Wireless USB Device Controller	HTML
Innovative Logic	Ultra Wide Band (USB) MAC controller	HTML

Peripherals

Vendor	IP Name	Datasheet
CAST	Single Controller Area Network	HTML
CAST	UART with FIFO and Synchronous CPU Interface	HTML
CAST	UART with Synchronous CPU Interface	HTML
CAST	Local Interconnect Network	HTML
CAST	UART with programmable FIFOs, IrDA I/F & Sync. CPU I/F	HTML

DSP

Vendor	IP Name	Datasheet
CAST	JPEG Codec	HTML
CAST	JPEG Decoder	HTML
CAST	JPEG Encoder	HTML
CAST	JPEG LS Encoder	HTML
CAST	JPEG2000 Encoder with rate control	HTML
CAST	Lossless JPEG Decoder	HTML
CAST	Lossless JPEG Encoder	HTML
OptNgn	FFT 1-Dimensional Library (libfftco_1d)	PDF
OptNgn	FFT 2-Dimensional Library (libfftco_2d)	PDF
OptNgn	FFT Kernel Library (libfftco_ker)	PDF

Communication

Vendor	IP Name	Datasheet
CAST	High Speed Serial Communication Interface	HTML
CAST	High-Level Data Link Control Protocol Controller	HTML
CAST	NEC Infrared Encoder/Decoder	HTML
CAST	RC5 Infrared Encoder/Decoder	HTML
EnSilica	eSi-Comms Communication IP Library	HTML

Storage

Vendor	IP Name	Datasheet
CAST	ATA Host Controller with DMA	HTML
CAST	NAND Flash Memory Controller (MLC) w/ ECC - up to 64 Gb	HTML
CAST	SDIO Host Controller	HTML
CAST	SmartCard Reader	HTML
Eureka	NAND Flash Controller	HTML
Eureka	SD / SDIO / MMC Host Controller	HTML
Eureka	SD / SDIO /MMC Slave Controller	HTML

Data Security

Vendor	IP Name	Datasheet
Helion	AES Key Unwrap cores	PDF
Helion	AES Key Wrap cores	PDF
Helion	AES-CCM combined encryption and authentication cores	PDF
Helion	ANSI Pseudo Random Number Generator (PRNG) cores	PDF
Helion	DES and 3DES cores	PDF
Helion	DVB Common Scrambling Algorithm (CSA) cores	PDF
Helion	Fast AES encryption and decryption cores	PDF
Helion	LZRW3 Loss-less Data Compression cores	PDF
Helion	MD5 Fast Hashing cores	PDF
Helion	Modular Exponentiation (RSA & Diffie-Hellman) cores	PDF
Helion	Multi-Mode Tiny Hashing cores	PDF
Helion	SHA-1 & MD5 dual-mode Fast Hashing cores	PDF
Helion	SHA-1 & SHA-256 dual-mode Fast Hashing cores	PDF
Helion	SHA-1 Fast Hashing cores	PDF
Helion	SHA-256 Fast Hashing cores	PDF
Helion	SHA-384 & SHA-512 Fast Hashing cores	PDF
Helion	Standard AES encryption and decryption cores	PDF

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