

CoreExpress[®]-A310

CoreExpress Module

Marvell Armada[™] 310 ARM Processor



Features

Marvell Armada 310 System-on-a-chip

256 MB, 512 MB DDR3 RAM (1 GB max.)

Single channel 24 bit LVDS

2 x PCI Express x1 lanes

SATA

Gigabit LAN, USB 2.0

Specifications

Board Format	CoreExpress, 58mm x 65mm
Processor	Armada 310 System-on-a-chip Sheeva [™] CPU core, ARM v5TE architecture 600 MHz, 1 GHz (2 GHz max.)
RAM	256 MB, 512MB, 1GB DDR3 RAM 600 / 800 MHz
Graphics	Integrated in processor
LVDS	Single channel 24 bit LVDS 1600 x 1200 px, 60 Hz
USB	4 x USB 2.0 host 1 x client for debug console
Ethernet	Gbit MAC (10/100/1000)
SATA	2 SATA ports (3.0 Gb/s)
Flash	8 MB for boot loader + Linux kernel
SDIO	4 bit support
PCI Express Bus	2 x1 lanes

Status LED	Controlled by SMC for board status
Watchdog	Yes (LEMT)
Power Supply	+5 V only. All necessary voltages are generated on-board.
Power Consumption	t.b.d. (approx. 3 W at 600 MHz)
Operating temperature	0°C...+60°C (commercial, all versions) -20°C...+60°C (industrial, all versions) -40°C...+85°C (extended, optional)
Cooling	Passive cooling Heat spreader is available
MTBF	574,713 hours @ 25°C
Loader	UBOOT boot loader
LEMT	Condition Monitoring
Supported OS	Linux

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CoreExpress specification available at www.sff-sig.org/coreexpress.html

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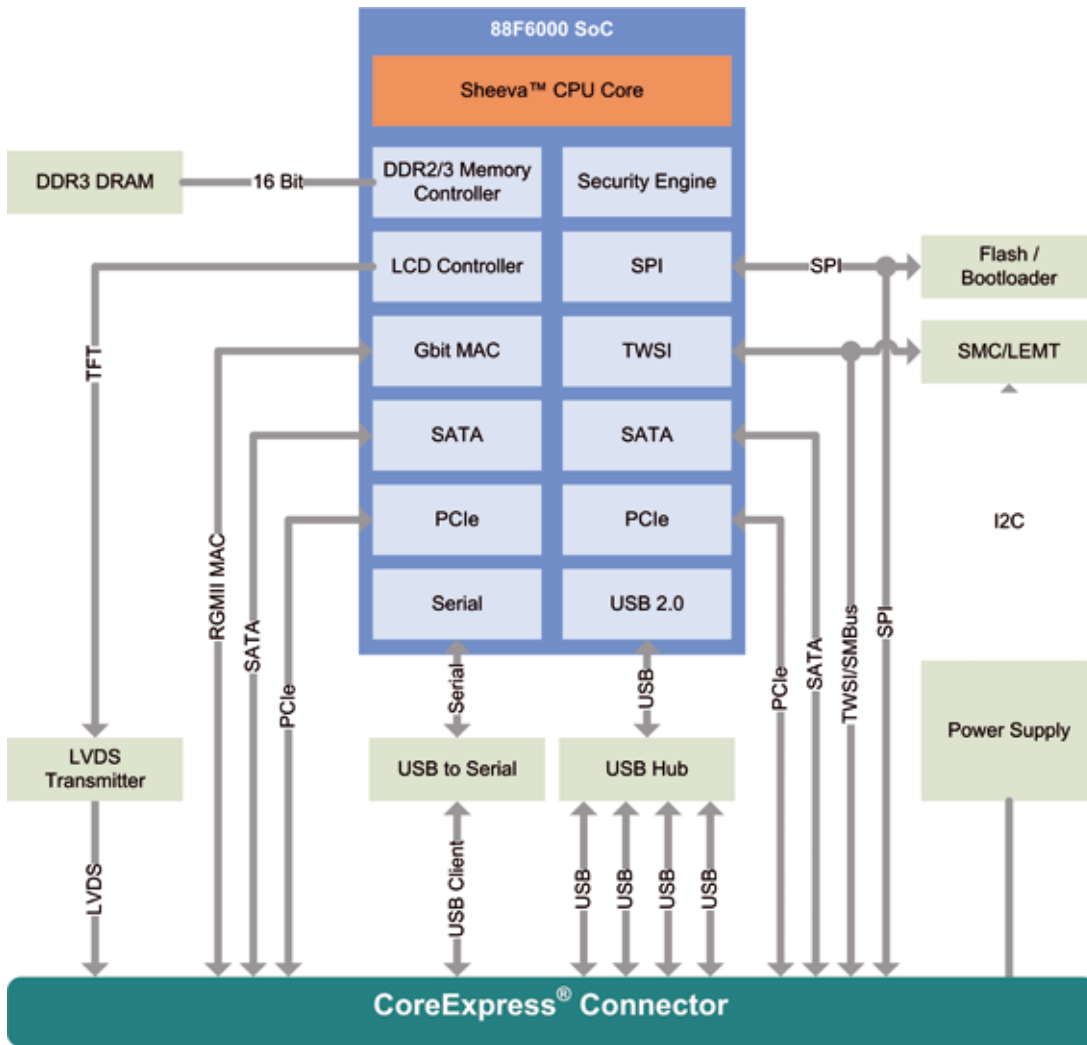
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Block Diagram



Ordering Information

Ordering Number	Description
713-0015-10	CoreExpress-A310 module, 600 MHz processor, 256 MB DDR3 RAM
713-0016-10	CoreExpress-A310 module, 1 GHz processor, 512 MB DDR3 RAM

Other configurations available on request. Minimum order quantities apply.

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