

ARMADA 300



The ARMADA 300 Series is the industry's most powerful processors utilizing the ARM instruction set with up to 2.0 GHz performance. The ARMADA 300 (88F6282) is suitable for a wide range of applications including routers, gateways, media servers, storage, thin clients, networking, and printer products. The ARMADA 310 (88F6283) is a low power version targeted for computer peripherals, consumer electronics, add-on cards, and small form factor devices such as [plug computers](#).

Key Features

- High-performance single-issue CPU operating at 1.6 GHz, 1.8 GHz, and 2.0 GHz (88F6282)
- Low-power single-issue CPU operating at 800 MHz, and 1 GHz (88F6283)
- 16KB-Instruction and 16KB-Data 4-way, set-associative L1 cache
- 256KB unified 4-way, set-associative L2 cache
- 16-bit DDR2/3 memory interface (up to 1066 MHz data rate)
- Two Gigabit Ethernet MACs with interface options
- Audio Video Bridging
- Two PCI-Express ports
- Single USB 2.0 port with integrated PHY
- Two SATA 2.0 ports with integrated PHYs
- LCD controller supporting up to 1080p and UXGA resolutions
- Network security engine with various encryption algorithm support
- Audio and MPEG Transport Stream Interface
- Two TDM Channels, SDIO/MMC, NAND flash, SPI, two TWISI, and two UART interfaces
- DMA/XOR engine with four channels
- RTC and Thermal sensor
- Compact Package (15 x 15mm FCBGA)

The innovative, on-chip crossbar architecture with any-to-any connectivity enables concurrent transactions among multiple units that results in high system throughput allowing system designers to create high-performance scalable systems. Tightly integrated CPU and memory controller significantly improves application performance.

ARMADA 310

The ARMADA 310 processor targets applications that require 1Ghz performance at under 1W while supporting extensive integrated features such as DDR3 and LCD Controllers. The Armada 310 is a perfect fit for low cost home and small office devices where energy efficiency is important without sacrificing the performance level needed to support critical communication interfaces (i.e. WiFi, BT, Zigbee/ZWave, GbE).

ARMADA 370

A highly integrated and high-performance ARM V7-based system-on-chip (SOC), the ARMADA 370 is suited for a variety of home and enterprise applications including SmartHub for Home, networked attached storage (NAS) devices, media servers, and wireless access points, as well as networking and education applications.

DOCUMENTATION

- [ARMADA 370 Product Brief](#)
- [ARMADA 300/310 Product Brief](#)
- [Mobile Display Technologies WP](#)

CLOUD COMPUTING SOLUTIONS

Learn how Marvell packed a computer the size of power adaptor with enough processing power and network connectivity to run as a digital media server. [Learn More](#)



ADDITIONAL INFORMATION

Marvell and its partners provide innovative and customized SoC products. Contact your [local sales office](#) for information on solutions tailored to your business needs.