Dido Texas Instruments DM814x CPU module



Dido is a ready-to-use CPU module based on Texas Instruments DM8148 high performance application processor. Dido is the cutting edge solution for a high range of applications where extended connectivity, sophisticated displays, rich user-interfaces are required, including videosurveillance cameras, medical video analysis, smart home controllers, security systems, automation and point of service. Dido is designed to be easily included in customer's embedded systems, due to the small form factor, the inexpensive stacking connectors and the back-compatibility with DAVE's Naon CPU module.

Main Features

CPU

- ARM Cortex-A8 architecture @ 1 Ghz
- DSP C674x engine @ 750 Mhz
- Full HD Video Encoding/Decoding Capabilities
- PowerVR SGX 530 3D Graphic Accelerator

Memory

- Up to 2GB DDR3 @ 533MHz 64bit bandwith
- Flash NOR and Flash NAND on board

Interfaces

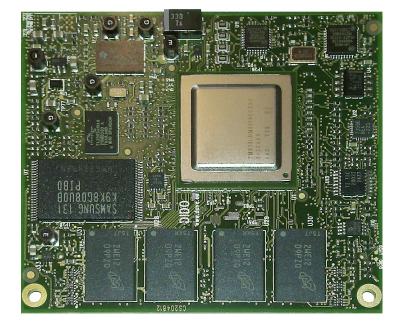
- Up to Dual video input ports up to 24bits
- Up to Dual video output ports up to 24b
- PCle lane
- SATA interface 3.0 Gbps
- HDMI 1.3
- Fast Ethernet LAN and integrated Gb Ethernet Switch
- 2 x USB Host, 1 x USB OTG
- 2 x SD/MMC
- · High-end Dual CAN controller
- TV OUT, Touch Screen controller
- 3 x UART, 2 x I²C, 3 x SPI, 1 x I²S, McASP interface
- 3.3V GPIO available

Mechanical

- Connectors: 2 x 140 pins 0.6mm pitch
- Small form factor: 70mm x 60mm
- 100G mechanical retention
- Commercial and industrial temperature range

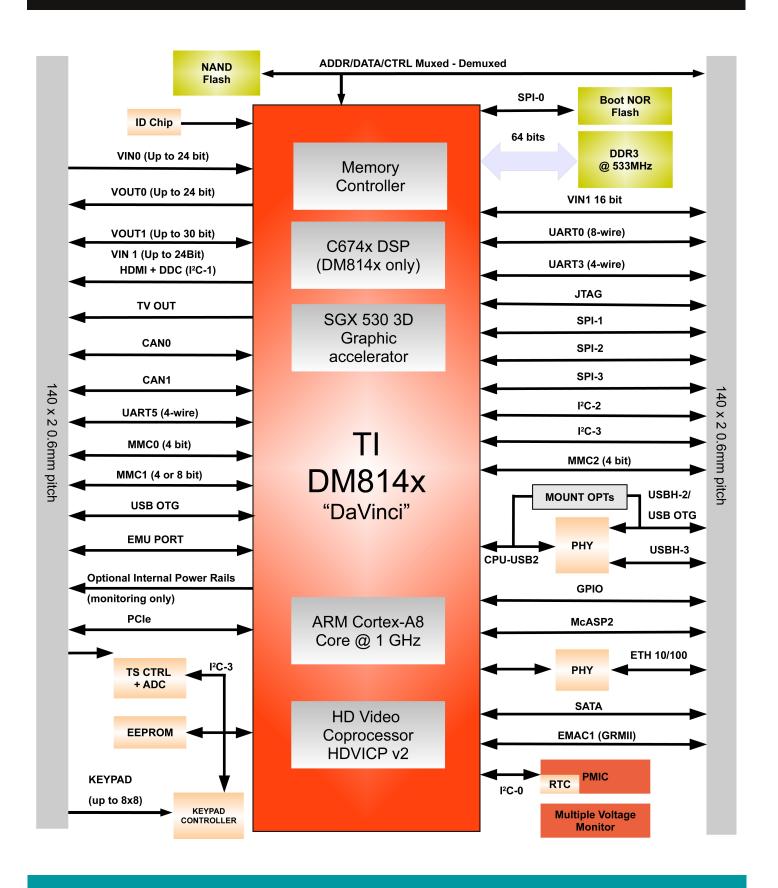
PSU

- 3.3V, voltage regulation on board
- Consumption: Decode & Display H264 1080p60 video on HDMI: 3.9W





Block Diagram





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