



MOZART CPU (Code 300059)

Expandable Single Board Computer

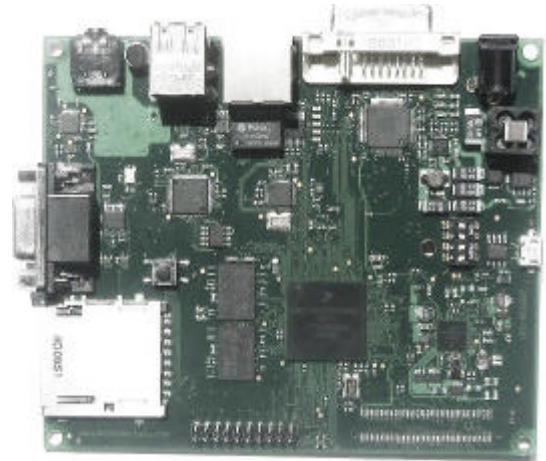


1. Overview

The **MOZART CPU** is a SBC with additional expansion connectors that make it extremely versatile. It is based on the powerful **Freescale i.MX51** processor and contains all the necessary electronics to make it up and working. It runs **Windows Embedded CE 6.0 R3**.

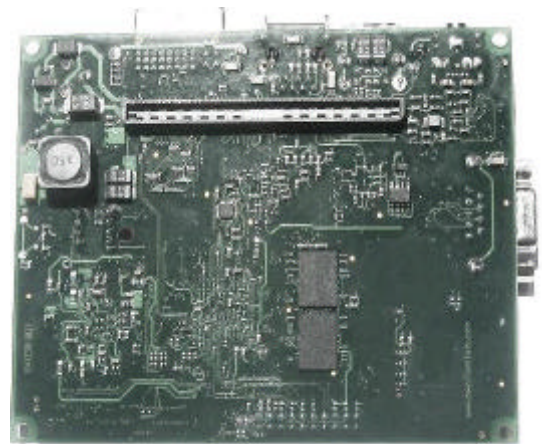
2. i.MX51 Processor

- 800 MHz ARM Cortex A8 CPU
- 32 KB Instruction and data caches
- Unified 256 KB L2 cache
- NEON SIMD media accelerator
- Vector Floating Point coprocessor
- Image and video resize, inversion, and rotation hardware
- Alpha blending and color space conversion
- OpenGL ES 2.0 3D and OpenVG 1.1 2D hardware accelerators
- Multi-format HD 720p video decoder and D1 video encoder hardware engine
- 24-bit primary display support up to WXGA resolution
- 18-bit secondary display support
- Rich set of integrated peripherals



3. Board

- 10 V to 26 V DC Power Supply input connector
- 4.5W (Full Screen HD720 Playing from Ethernet)
- 512 MB @ 200MHz DDR2 SDRAM memory
- DVI connector for primary display
- 10/100 Ethernet connector
- Hi-Speed USB OTG connector
- Built-in microphone
- Stereo Headphone audio output
- RS 232 debug port
- SD memory connector (OS + File System)
- 7 port Hi-Speed USB HUB with 2 x USB HOST connectors
- JTAG
- PCB Dimensions: 120mm X 100mm



4. Expansion

Through the expansion headers the following additional signals groups are available: Power Supply, NAND Flash, Primary Display, Secondary Display, I2C, SPI, I2S, Touch Screen, SPDIF, GPIO, Keypad, 2 x UART, 5 x Hi-Speed USB Host, Secondary SD memory, TV Encoder, CMOS Camera, EIM, PWM, Reset, Clocks, Audio Line in/out and MIC.