
M31N ARM11 Single Board

Hardware Specification

- Freescale 532MHz iMX31 ARM11 CPU with 128K L2 Cache and hardware Security function feature Electronically Blown Fuses and other several hardware/software way to protect devices' IDs, security code & other data.
- Optional 400MHz industrial version support -45C to 85C working temperature
- Up to 2GByte NAND Flash, standard 256MB Flash
- Up to 256MByte DDR SDRAM, standard 128MB RAM
- Smart Multimedia: H.263, MPEG-4, RV (RealVideo), WMV (Windows Media Video), MPEG-2, DivX and optional H.264
- 3.5"~8" 320x240 ~ 800x600 LVDS/CMOS LCD port, support with integrated frame buffer
- 2D/3D(Optional) Graphic Processing Unit (GPU)
- Touch Screen interface
- On-board USB OTG (On-The-Go)
- Audio Input / Output supports Headphone, 1W Class D speaker, microphone,
- 1 x RS-232 (Tx, Rx, RTS, CTS) and 1 x RS-485 system default
- 2 x RS-232 (DTE full 8-pin)/RS-422/RS-485 ports
- 4 x RS-232 (DTE full 8-pin) ports without Transceiver Drive IC
- 3 x internal multi Serial ports, UART / SPI programming ports
- 12 x GPIO
- 4 x ADC, one for Input Voltage measurement
- 1 x PWM
- SPI, I2C ports for extension
- Optional 4 x Video Input
- Optional TVOUT Port
- 8 x 8 keypad interface to external keyboard
- RTC (real time clock) with battery back-up
- Watchdog timer and status LEDs
- Optional Battery/Power Backup 128KB SRAM, up to 512KB
- Internal High Speed USB Port
- 10/100Mb Either Net LAN
- Windows CE 5.0 with multiple language support
- API provided for easy development
- SD Card interface
- System Auto Power On by Detect Input Voltage
- -20C to 70C temperature range for main unit, optional -45C to 85c Industrial version
- Manual Push Button Power On/Off
- Wide range 6Vdc ~ 36Vdc
- Voltage Detection and Software Power on/Off controller
- 12KB Flash by I2C for Special Application
- Build in Diagnostic Software
- Low power, whole board be natural cooled.
- Dimension: 134mm x 94mm

