

SBC-i.MX51

Single-Board Computer

The Single-Board Computer SBC-i.MX51 is based on Freescale's high-performance i.MX51 mobile platform, incorporating an ARM Cortex-A8 CPU, an Image Processing Unit (IPUv3EX), a Video Processing Unit (VPU) and a Graphical Processing Unit (GPU). The IPUv3EX provides comprehensive support for connectivity to displays and cameras. The VPU supports hardware encoding and decoding of MPEG-4, H.263, H.264 and many more standards. The GPU serves 3D and 2D acceleration in hardware. The board's memory capabilities (NAND Flash, DDR2) and numerous interfaces like Ethernet, HDMI, 4xUSB and USB-OTG turn the SBC-i.MX51 into the ultimate development board for future high-end embedded devices.

Advantages

- » Tiny, low-cost i.MX51 board
- » High-performance embedded ARM processor
- » Multimedia video hardware en-/decoder
- » Numerous peripheral interfaces
- » Linux and WinCE support

Target Applications

- » Industrial applications
- » Automation and control systems
- » Multimedia consumer devices (Netbooks)
- » Rapid Development Kit for embedded systems

Hardware Features

PROCESSOR	Freescale i.MX51 Multimedia Application Processor incorporating 32 bit ARM Cortex-A8	Product illustration not binding
CLOCK	Up to 800MHz	
L1/L2 CACHE	32kB instruction + 32kB data / 256kB shared	
MEMORY	512MByte DDR2 SDRAM 2GByte NAND Flash	
POWER MANAGEMENT	MC13892VK power management IC	
INTERFACES	1-Wire, Audio, Camera, CVBS, Ethernet, HDMI, I ² C, JTAG, Keypad, LCD, LEDs, PWM, SD-Card, SPI, 3xUART, 4xUSB, USB-OTG	
TEMP. RANGE	0°C to +85°C	
DIMENSIONS	120x120mm	
OPERATING SYSTEMS	Linux (Kernel 2.6.31), Windows CE 6.0	
AVAILABLE LINUX IMAGES	QtEmbedded 4.6.2., GNOME 2.30, Console	

Ordering Information

Order No.	Info
100-4110-2	SBC-i.MX51 Single Board Computer
100-2520-2	Experimental Extender Board for SBC-i.MX51
100-2523-1	Display Extender Board for SBC-i.MX51
100-2524-1	Communication Extender Board for SBC-i.MX51



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