

CM-i.MX53

i.MX based System-on-Module



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The Core Module CM-i.MX53 is based on Freescale's next generation, high-performance, power-efficient, consumer multimedia applications processor i.MX53. This processor features OpenGL® ES 2.0 and OpenVG™ 1.1 hardware accelerators, a multi-format HD1080p video decoder and a HD720p video encoder hardware engine, dual display capability, a SATA controller, IEEE1588 time-stamping and numerous serial interfaces (SDIO, SPI, I2C, UART). Further features are integrated security solutions, USB 2.0 controllers, Ethernet controller and a camera input (CSI).

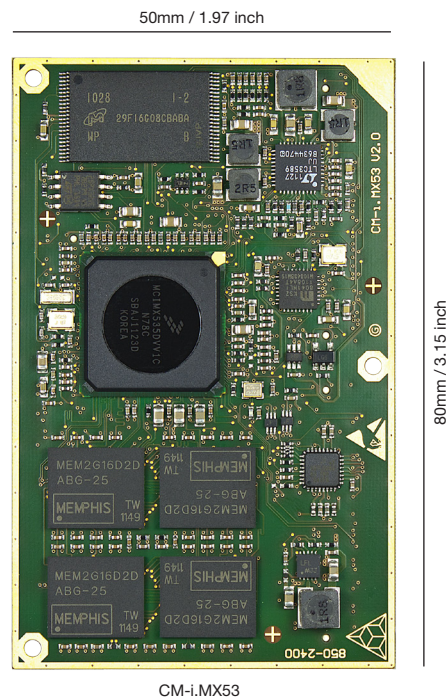
The Core Module is available for both, commercial and industrial temperature range. It addresses 1GByte DDR2-SDRAM, has an onboard NAND-flash of 2GByte and an additional SPI NOR-flash of 4MByte.

Highlights

- » Powerful i.MX53 SoC
- » ARM® Cortex™-A8 up to 1000MHz
- » 1 GByte DDR2-SDRAM
- » 2 GByte NAND Flash
- » Ethernet physical (10/100 Mbit) on-board
- » Stereo audio codec on-board
- » Industrial Core Module (-40 to +85°C)

Ordering Information

| Order No. | Info |
|------------|------------------------------------|
| 100-4120 | i.MX53 Development Starter Package |
| 100-4170-2 | CM-i.MX53 Industrial |
| 100-4171-1 | CM-i.MX53 |



Applications

- » Human-Machine-Interface
- » Imaging and Consumer Multimedia
- » Set Top Boxes
- » Industrial Applications

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i.MX53 Facts

The state of the art i.MX53 SoC in combination with the outstanding integration of several peripheral controllers, memory and voltage control, turn the CM-i.MX53 into a high-performance embedded platform for your future applications.

Feature Overview

| | | |
|-------------------|--|---------------------------------|
| SoC | Freescall i.MX53 ARM® Cortex™-A8 | |
| CLOCK* | 1 GHz / 800 MHz | |
| RAM* | 1 GByte DDR2-SDRAM | |
| FLASH* | 4 MByte NOR / 2 GByte NAND | |
| INTERFACES | AUDIO | Headphones, Mic., Line In / Out |
| | CAN** | 1 |
| | CSI (10Bit) | 1 |
| | SPI / OWIRE | 2 / 1 |
| | ETHERNET | 1x10/100 MBit Ethernet PHY |
| | LVDS | 2 |
| | PARALLEL DISPLAY PORT | 2 (18-bits / 24-bits) |
| | SATA | 1 up to 1.5 Gbps |
| | SD-INTERFACE | 2 (1x 4-bit, 1x 8-bit) |
| | I²C | 2 |
| | UART | 3 |
| | USB 2.0 | 2 (1 x OTG / 1 x Host) |
| | POWER SUPPLY | 2.7V - 5.5V |
| VERSIONS | Industrial -40 to +85 °C Commercial 0 to +70 °C | |
| DIMENSIONS | 80 x 50mm | |

*depends on version - see ordering information

** industrial version only

Further information at
<http://www.bluetechnix.com/goto/cm-i.mx53>

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