CM-i.MX53

i.MX based System-on-Module

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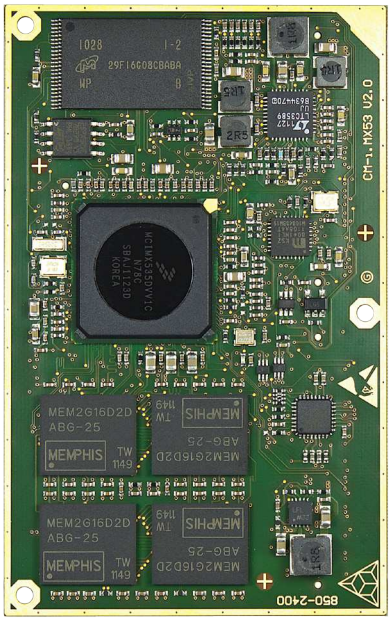
The Core Module CM-i.MX53 is based on Freescale's next generation, high-performance, power-efficient, consumer multimedia applications processor i.MX53. This processor features OpenGL® ES 2.0 and OpenVG™ 1.1 hardware accelerators, a multi-format HD1080p video decoder and a HD720p video encoder hardware 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.

50mm / 1.97 inch



80mm / 3.15 inch

CM-i.MX53

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)

Applications

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

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

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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		Freescale 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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