# i.MX53 SODIMM Module

The i.MX53 module represents the next generation of advanced multimedia, power-efficient and cost-effective solution for embedded systems. With preinstalled operating system and running up to 1.2GHz, the module enables designing of high-end products with quick set-up and easy-to-handle

programming of own applications.



The core component is a high-performance Freescale's i.MX535 advanced multimedia processor with very low power consumption. Only 1mm thick 10-layer HDI micro-via PCB board carries CPU + Flash + SDRAM + Ethernet and provides vast majority of the embedded systems must-have peripherals.

The 1.2GHz CPU is optimized for performance and power to meet requirements of today's high-end devices, what makes it ideal for a broad range of applications in consumer, automotive, medical and industrial markets.

The i.MX53 CPU further includes an integrated display controller, full HD capability, enhanced graphics and connectivity features.

#### With the i.MX53 COM, you can enjoy all the benefits of:

- using modular solution and focus all the effort at your customer's requirements. With SODIMM modular solution, you will not be reinventing what's already available thus can save huge amount of your development time
- running operating system on your own product provides you with an option of re-using already existing code such as drivers or standard applications and accelerating your software development
- having access to schematics freely available at Voipac website minimizes the number of required hardware spins allowing you to stay within budget and keep timetable under control
- getting excellent free support provided with every complete development kit saves not only the startup time, but the overall project time requirements

As the only manufacturer in the embedded COM segment, Voipac provides free and complete schematic of the Computer on Module to every complete development kit purchased.

### **Hardware Specification**

CPU: i.MX53 (Freescale)

up to 1.2GHz, ARM Cortex™-A8

NAND FLASH: up to 16GB
DDR3 SDRAM: up to 2GB
I2C EEPROM: up to 512Kb
SPI FLASH: up to 64Mb
Ethernet: 10/100 Mbps

Accelerometer: 3-axis

SMSP power supply: 3V3/2A, VIO/2A

I/O voltage: 1.8V / 3.3V, configurable
Power supply: single 3.6 V to 5.5 V
Form factor: 200pin SO DIMM
Dimensions: 67.6 x 38.0 mm

Temperature range: Commercial 0°C to +70°C

Extended -20°C to +70°C

(excluding microSD socket) Industrial -20/-40°C to +85°C

**RoHS** compliant

#### **Key Features**

High-Speed USB 2.0 OTG

**High-Speed USB 2.0 Host** 

LCD controller supporting UXGA 1600x1200

Dual display support Dual camera interface

Hardware accelerated image processing

**NEON SIMD** media accelerator

OpenGL ES 2.0

and OpenVG 1.1 dual graphics accelerator

**Vector Floating Point** 

3xUART/2xSDIO/I2C/SPI/EIM/GPIO

2xSSI/AC97/I2S

**Keypad controller** 

## **Supported Software**

OS Linux 2.6 (preinstalled)

Android Gingerbread 2.3 (optional)

Windows Embedded Compact 7 (optional)











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