

# Qseven-i.MX537

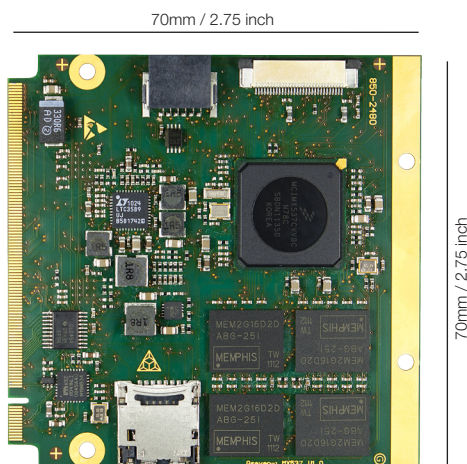
Qseven® compliant i.MX53 Module



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The Qseven® compliant Module Qseven-i.MX537 is based on Freescale's next generation, high-performance, power-efficient, consumer multimedia applications processor i.MX537. 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, a SATA controller and numerous serial interfaces. Further features are integrated security solutions, USB 2.0 controllers and an Ethernet controller.

The Qseven® module is available for the industrial temperature range (-40 to +85°C). It addresses 1GByte DDR2-SDRAM, has an on-board NAND-flash of 2GByte and an additional SPI NOR-flash of 4MByte.



## Highlights

- » Qseven® Rev. 1.2 compliant
- » Designed for industrial applications
- » Powerful Cortex™-A8 core
- » 1 GByte DDR2-SDRAM
- » 2 GByte NAND Flash

The state of the art i.MX53 SoC in combination with the outstanding integration of several peripheral controllers, memory and voltage control, turn the Qseven-i.MX537 into a high-performance embedded platform for your future applications.

## Applications

- » Industrial Applications
- » Human-Machine-Interface
- » Medical Devices
- » Home automation
- » Imaging and Consumer Multimedia
- » Set Top Boxes

## Ordering Information

| Order No.  | Info                  |
|------------|-----------------------|
| 100-1500-1 | Qseven-i.MX537 Module |

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## Qseven® Facts

The Qseven concept is an off-the-shelf, multi vendor, Computer-On-Module that integrates all the core components of a common PC and is mounted onto an application specific carrier board. Qseven modules have a standardized form factor of 70mm x 70mm and have specified pinouts based on the high speed MXM system connector that has a standardized pinout regardless of the vendor.

## Feature Overview

|                           |                                    |                                   |
|---------------------------|------------------------------------|-----------------------------------|
| <b>PROCESSOR</b>          |                                    | Freescall i.MX537 ARM® Cortex™-A8 |
| <b>CLOCK</b>              |                                    | 800MHz                            |
| <b>RAM</b>                |                                    | 1GByte DDR2-800 SDRAM             |
| <b>FLASH DISK</b>         |                                    | 4MByte NOR / 2GByte NAND          |
| <b>Qseven® INTERFACES</b> | <b>Serial ATA Channels</b>         | 1                                 |
|                           | <b>USB 2.0 ports</b>               | 7 Hosts + 1 OTG                   |
|                           | <b>LVDS Channels*</b>              | 2                                 |
|                           | <b>Display Port / TMDS / SDVO</b>  | 0 / 1 / 0                         |
|                           | <b>HDA</b>                         | 1                                 |
|                           | <b>Ethernet 10/100 Mbit</b>        | 1                                 |
|                           | <b>PC / SPI / CAN</b>              | 2 / 1 / 1                         |
|                           | <b>SDIO</b>                        | 1                                 |
|                           | <b>JTAG</b>                        | 1                                 |
|                           | <b>Power Button / Reset Button</b> | 1 / 1                             |
|                           | <b>LID Button / Sleep Button</b>   | 1 / 1                             |
|                           | <b>Wake / Battery low alarm</b>    | 1 / 1                             |
|                           | <b>Thermal control</b>             | 1                                 |
|                           | <b>FAN control</b>                 | 1                                 |
| <b>ADDITIONAL</b>         | <b>Sleep modes</b>                 | Various sleep modes available     |
|                           | <b>Image sensor interface</b>      | 1 x BLT-ISM-Connector for ISM     |
|                           | <b>Micro SD card slot</b>          | 1 x on-board                      |
|                           | <b>Debug Interfaces</b>            | 1 x UART, 1 x SPI                 |
| <b>VERSIONS</b>           |                                    | Industrial -40 to +85 °C          |
| <b>DIMENSIONS</b>         |                                    | 70 x 70mm                         |

\* only one LVDS available when using TMDS

BLUETECHNIX Mechatronische Systeme GmbH  
Waidhausenstraße 3/19 | 1140 Wien, Austria  
+43 (1) 9142091 x 0 | +43 (1) 9142091 x 99  
[www.bluetechnix.com](http://www.bluetechnix.com) | [office@bluetechnix.com](mailto:office@bluetechnix.com)