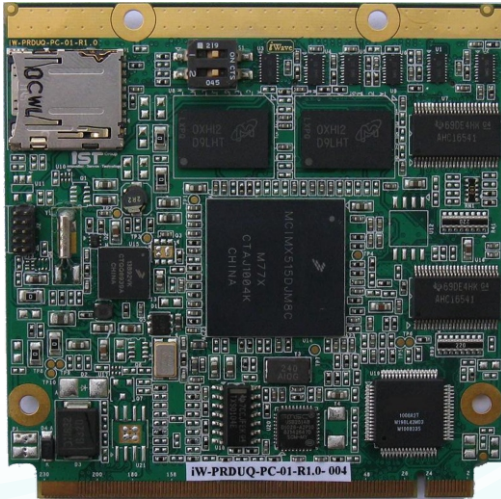


# System On Module RainboW-G8M-Q7 Qseven Compatible i.MX51 Module



iWave Systems launched its latest low power, high performance, Qseven compatible SOM module based on Freescale's i.MX515 ARM Cortex-A8 Application processor. This module offers high performance processing with a high degree of functional integration, aimed at the growing Industrial automation, healthcare and general embedded control applications. The board supports the major operating systems including Linux, WinCE6.0, Android 2.3 and QNX.

The module is compatible to Qseven R1.20 ARM specification and features i.MX515 / 800MHz CPU, on board DDR2 RAM, NAND Flash, Micro SD slot and JTAG headers. The module is highly packed with optional on board SATA bridge and CAN controller

**APPLICATIONS :** Industrial Handheld, Green Energy Controller, Panel PC, Medical HMI, High-end PDAs, General Embedded.



## iW-RainboW-G8M-Q7 HIGHLIGHTS

Compact, Low power CPU Module,  
ARM Cortex A8 @ 800 Mhz

Compliance to Qseven Standard R1.20  
standard (70mm x 70mm)

Industrial temperature grade support

Long term support: 5+ Years

Technical & Customization support,  
even for the low volume segment

## SPECIFICATIONS

### CPU

i.MX515/ 800 MHz

### Memory

128Mbyte DDR2 (Expandable to 512MB)

128Mbyte Nand Flash (Expandable to 2GB)

Onboard microSD Slot

### Q7 Edge Connector

SATA Port\*

USB 2.0 Hostx4/ USB 2.0 Device

CAN Port\*

LVDS Channel

AC'97 Port

10/100 Ethernet

SD/MMC Port

I2C, SPI Port

### Expansion Connector - Interfaces

4 x 4 Keypad

Camera Interface

UART – Dual ports

4 wire Touch screen

GPIO-16 No's

### Temperature

Operating 0°C to +60°C/ Industrial\*

### Board Form factor

Qseven R1.20 compatible (70x70mm)

### OS Support

Linux 2.6.35

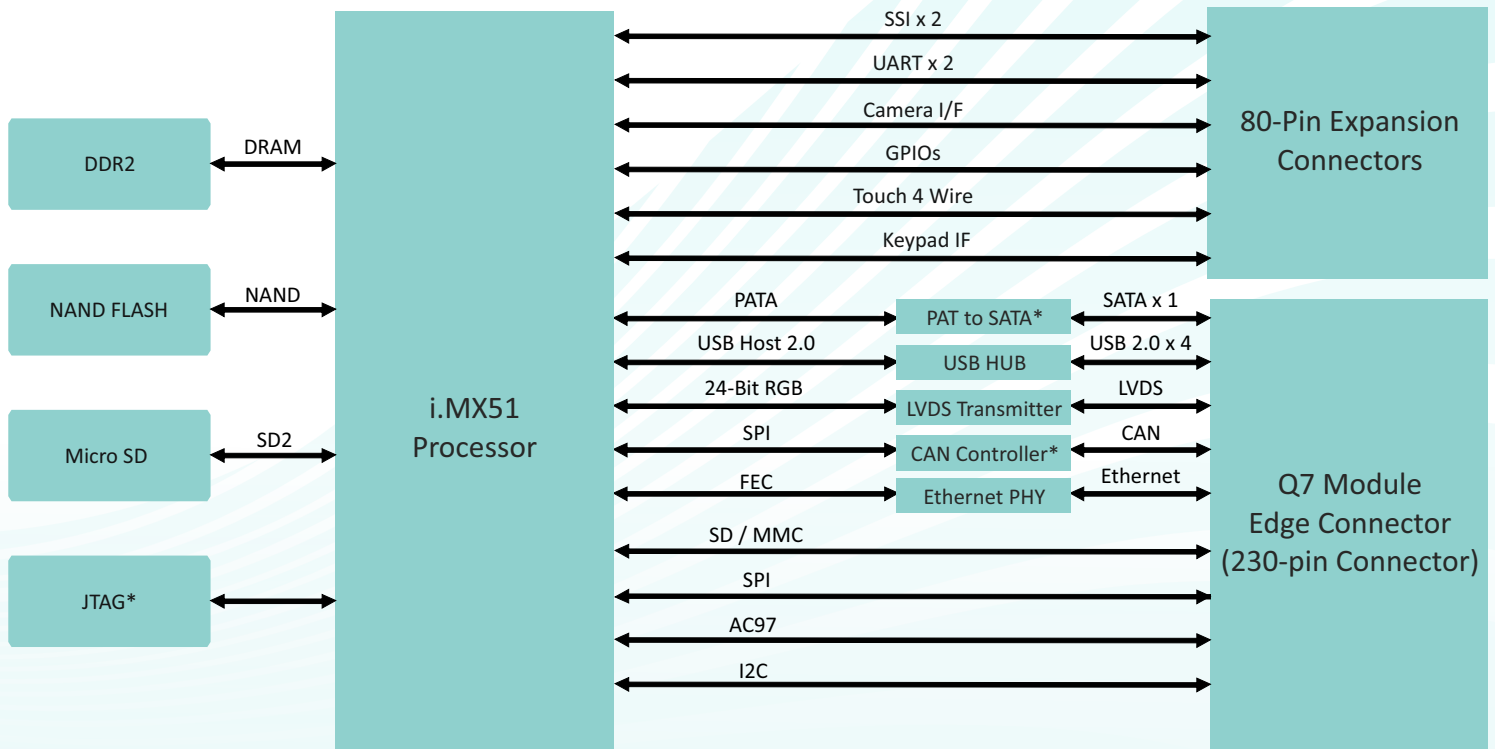
Android 2.3

WinCE 6.0

QNX\*

\* Optional

**i.MX51 Qseven MODULE BLOCK DIAGRAM**



\*Optional

**OS SUPPORT**

WinCE 6.0  
Linux 2.6.35  
Android 2.3  
QNX\*

\*Optional

**DELIVERABLES**

i.MX51 Q7 SOM module  
2GB micro SD card  
Board Support Packages  
User Manual

**OPTIONAL KITS**

iW-RainboW-G7D  
(ARM Q7 generic carrier board)

**CUSTOM DEVELOPMENT**

BSP Development / OS Porting  
Design review and support  
Custom SOM / Carrier Development

iWave Systems Technologies, established in 1999, focuses on Product Engineering Services involving Embedded Hardware, Software & FPGA. The company designs and develops cutting edge products and solutions. iWave has been an innovator in the development of highly integrated, high performance, low power and low cost System On Modules and Development Platforms. iWave's expertise has brought out multiple SOMs based on ARM, Freescale, Intel Atom, Marvell and TI Processors.

iWave Systems has won the confidence of its customers over the years by being a reliable partner in developing innovative products. Our engineers combine outstanding System design experience to deliver Quality Solutions. iWave specializes across Industrial, Automotive and Medical domains. We support our customers by being time efficient, which in turn helps our customers accelerate time to market their products. iWave is a Windows embedded Silver partner and a winner of the Partner Excellence Award.

*Note: iWave reserves the right to change these specifications without notice as part of iWave's continuous effort to meet the best of breed specification. The registered trademarks are proprietary of their respective owners.*

\*Optional items not included in the standard deliverables

**Ordering the i.MX51 Qseven SOM Module**

The SOM Module can be ordered online from the iWave Website  
<http://www.iwavesystems.com/webforms>

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