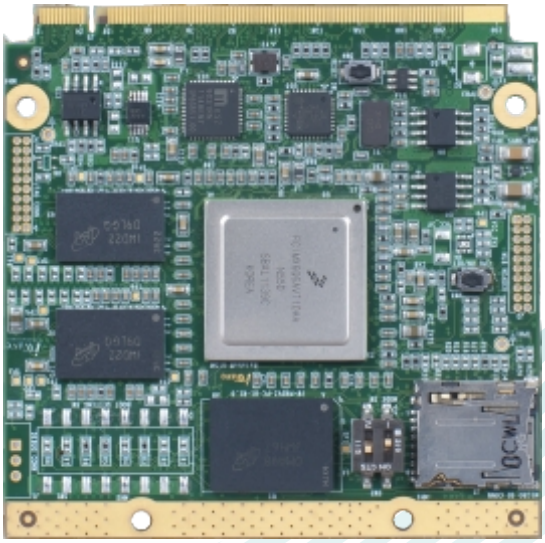
iWave
Embedding Intelligence

System On Module RainboW-G15M-Q7

Q7 Compatible i.MX6x Module



*i*Wave systems launching high performance Q7 SOM module based on Freescale's i.MX6x ARM Cortex-A9 processor for faster and multimedia focused applications. With extreme peripheral integration, the CPU supports industry latest high-performance interfaces, such as PCIe Gen2, Gigabit Ethernet, SATA 3.0, HDMI 1.4, SDXC, MIPI CSI/DSI and 64-Bit DDR3 interfaces.

The module is compatible to Q7 R1.20 ARM specification and features 1GHz ARM Cortex A9 Dual or Quad core CPU, on-board 1GB DDR3 RAM, eMMC Flash, Micro SD slot and JTAG headers

APPLICATIONS : Advanced HMI, Automotive IVI, Video & navigation, graphical instrument clusters, portable medical devices and Single board SOC computing

i.MX6x Q7 SOM HIGHLIGHTS

ARM Cortex A9@ 1GHz Dual/Quad core

64-bit DDR3-1066 support

OpenGL® ES 2.0 3D, OpenVG™ 1.1graphics accelerators

Multi format HD1080p HW decode and encode

Four simultaneous display support

Integrated high bandwidth connectivity peripherals

Industry latest HDMI1.4, SDXC, MIPI CSI/DSI interfaces

Technical &quick customization support

5+ years, Long term support

SPECIFICATIONS

CPU:
i.MX6x 1GHz Cortex A9 D/Q Core
Memory
1GB DDR3 SDRAM [Expandable]
Optional 8GB eMMC Flash
Optional SPI Flash
On-board Micro SD Slot
Q7 Edge Connector
PCIe v2.0 x 1 lane
HDMI 1.4
SATA 3.0 x 1
Gigabit Ethernet
Dual LVDS LCD support
USB2.0 Host x4
USB2.0 Device
AC97 Audio
8-bit SD/MMC
CAN1
SPI
I2C

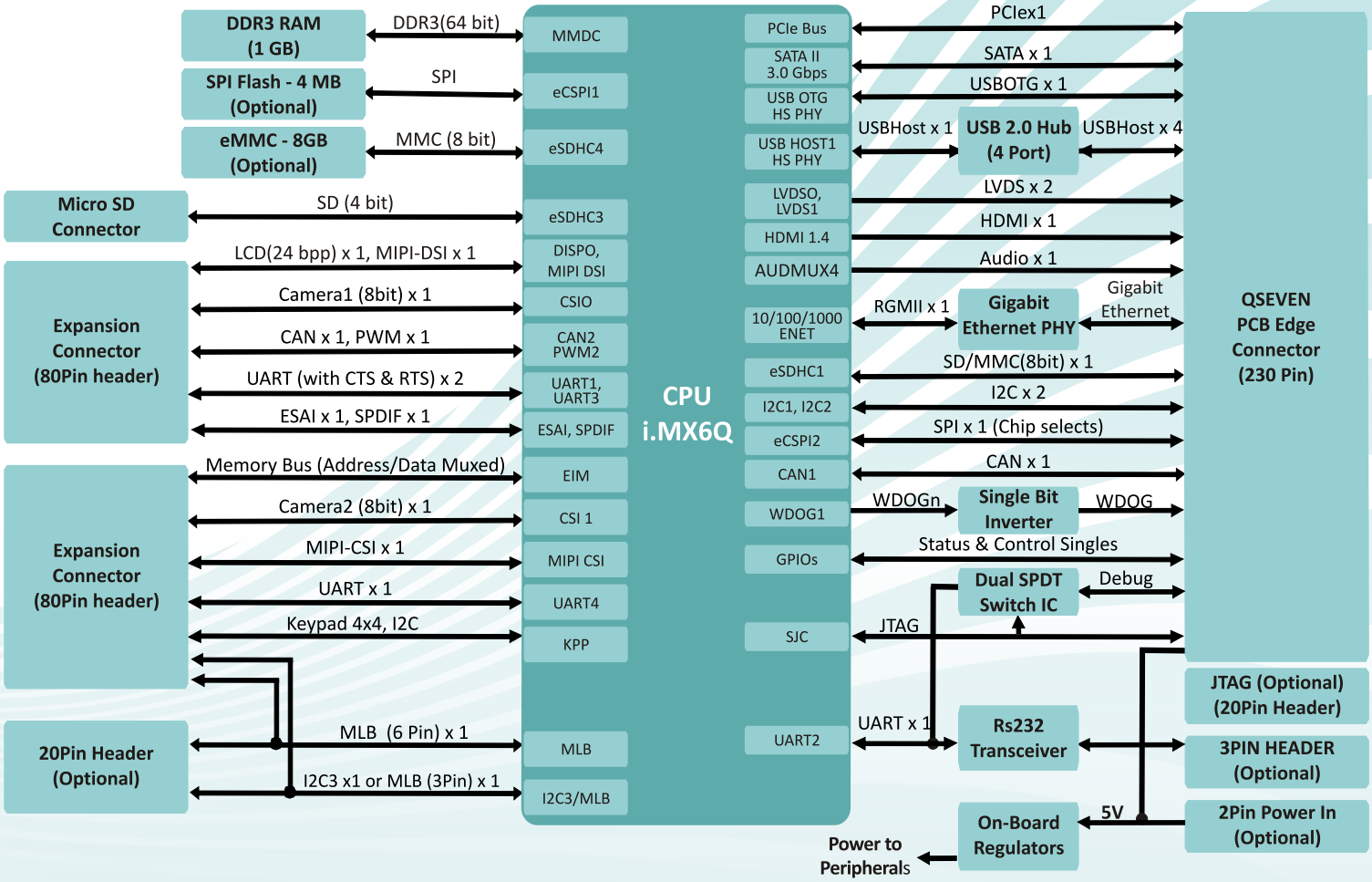
Expansion Connector
Camera CSIx2 (8-bit)
MIPI CSI, DSI
24-Bit RGB LCD IF
Dual UART
4x4 Key, Memory Bus
ESAI, SPDIF
MLB, CAN2
I2C2, PWM, GPIO
Temperature
0 to 70°C
Board Form factor
Q7 R1.20 Compatible
Power Input
5V, 1A Typical
Operating systems
Linux 2.6.38
Android 4.0*
WEC7*

** Optional*

iWave
Embedding Intelligence

freescale™
Alliance Member

i.MX6x Q7 MODULE BLOCK DIAGRAM



OS SUPPORT

Linux 2.6.38
Android 4.0*
WEC7*

DELIVERABLES

i.MX6x Q7 SOM module
Board support packages
User manual

OPTIONAL KITS

RainboW-G7D
(ARM Q7 generic carrier board)

CUSTOM DEVELOPMENT

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

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.MX6x Q7 Module

The SOM Module can be ordered online from the iWave Website
http://www.iwavesystems.com/enquiry.htm

iWave Systems Tech. Pvt. Ltd.,
7/B, 29th Main, BTM Layout 2nd Stage,
Bangalore-560076,
India.
Ph:+91-80-26683700, 26786245
Email: mktg@iwavesystems.com
www.iwavesystems.com

iWave Japan, Inc.
8F-B, Kannai Sumiyoshi Building,
3-29, Sumiyoshi-cho, Naka-ku,
Yokohama, Kanagawa, Japan.
Ph: +81-45-227-7626
Email: info@iwavejapan.co.jp
www.iwavejapan.co.jp

iWave Systems Tech. Pvt. Ltd.,
Landsberger Strasse 155,
Munich, 80687,
Germany
Ph: +49 (0) 89 8091 2914
Email: info@iwavesystems.eu
www.iwavesystems.eu

iWave Systems Tech. Pvt. Ltd.,
Suit 114, Courthill House, 60 Water Lane
Wilmslow, Cheshire SK9 5AJ,
United Kingdom
Ph : + 44 208 123 6521
Email: uk_sales@iwavesystems.com
www.iwavesystems.com