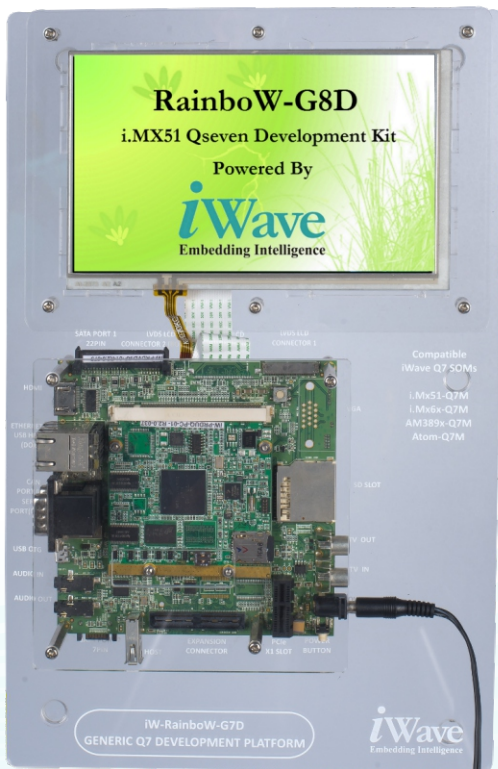# i.MX51 Qseven Development Kit

The Development Platform incorporates Qseven compatible i.MX51 SOM which is based on Freescale's i.MX51 Series 800 MHz multimedia focused processor and Generic Q7 compatible Development Board. This platform can be used for quick prototyping of any high end applications in verticals like Automotive, Industrial & Medical. Being a nano ITX form factor with 120mmx120mm size, the board is highly packed with all necessary onboard connectors to validate complete i.MX51 CPU features.

APPLICATIONS : Advanced HMI, Medical Handheld, Digital Signage, Panel PC, Industrial Handheld, Secure Devices, High-end PDAs

iW-RainboW-G8D-Q7 HIGHLIGHTS

Ideal for Quick Proof of concept (POC) development

Shortens 60% of the new product development life cycle

Suitable for validation of any R1.20 Qseven compatible module

Quick customization services in a very shorter period

SPECIFICATIONS

CPU:	Video OUT:
i.MX51 CPU @ 800 MHz	7" LCD (800x480) 4 Wire Resistive Touch screen
RAM:	
128MB DDR2, Expandable up to 512MB	Analog RGB - TV Out*
Storage:	OpenGL ES 2.0 and OpenVG 1.1 hardware accelerators
128MB NAND Flash, Expandable up to 2 GB	**Connectivity:**
Micro SD slot	802.11b/g/n Wi-Fi*
Standard SD slot - 1 Port	PCIeMini Card for 3G Module*
Communication interfaces:	**Miscellaneous*:**
USB 2.0 Host - 3 Ports	SPI header
10/100 Mbps Ethernet - 1 Port	3x3 keypad Interface header
USB 2.0 device - 1 Port	RTC, UART, SSI
RS232 - 2 Ports	Up to 30 GPIOs
CAN-1 Port*	Memory Bus
Mini PCIe (USB interface) - 1 Slot	Two 80pin expansion connector
Audio:	**Power Input:** 12V DC Input
Audio IN/OUT Jacks*	**Temperature:** 0 to +60℃
Video IN:	**Form Factor:**
Camera Interface *	120mm X 120mm Nano ITX
TV In *	

*Optional

![iWave logo] **iWave**
Embedding Intelligence

i.MX51 Qseven DEVELOPMENT BOARD BLOCK DIAGRAM
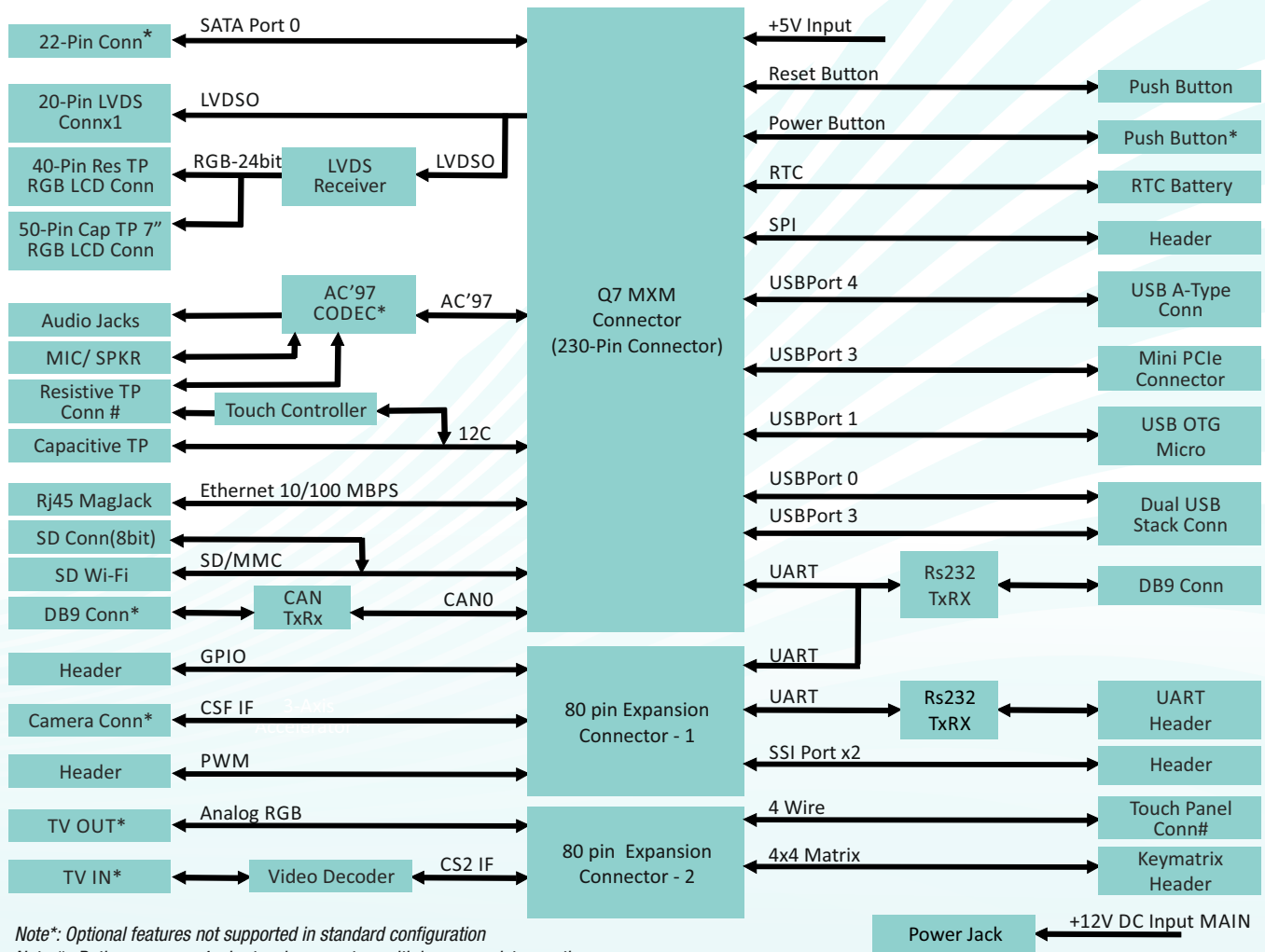
Note*: Optional features not supported in standard configuration
Note # : Both uses same 4 wire touch connectors with jumper resistors option

OS SUPPORT

WinCE 6.0
Linux 2.6.35.3
Android*

*Optional

DELIVERABLES

RainboW-G8D-Q7 Platform
Board Support Packages
Power Adapter
User Manual

OPTIONAL Add On Modules

7" Capacitive Touch Add On Module
10" 24BPP LVDS LCD Add On Module
Wi-Fi Add On Module

CUSTOM DEVELOPMENT

Custom SOM/ Carrier Card Development
BSP Development/ OS Porting
Design Review & 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.MX51 Qseven Development Board
The board can be ordered online from the iWave Website
http://www.iwavesystems.com/webforms

IW-G8D-Q7-BR-R1.0

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