

Development Platform iW-RainboW-G12D-Q7 DM816x Qseven Development Kit



The Development Platform incorporates Qseven compatible DM816x SOM which is based on TI's DSP+ARM Cortex-A8 based DaVinci Processor operating up to 1.2GHz and Generic Qseven compatible Carrier Board. This platform can be used for quick prototyping of any high end applications in verticals like Industrial, Medical and Networking. Being a nano ITX form factor with 120mmx120mm size, the board is highly packed with all necessary onboard connectors to validate complete DM8168 CPU features.

APPLICATIONS: Single-Board Computing, Network and Communications Processing, Industrial Automation, Human Machine Interface, Interactive Point-of-Service Kiosks

iW-RainboW-G12D-Q7 HIGHLIGHTS

TI DM8168 ARM Cortex-A8 based Sitara Processor operating up to 1.2 Ghz

Ideal for Quick Proof of concept (POC) development.

Shortens 60% of the new product development life cycle

Quick customization services in a very shorter period

Suitable for Wide Range of Applications

SPECIFICATIONS

CPU:

TI DM816x CPU @1.2 GHz

RAM:

1GB DDR3 RAM

Storage:

128MB NAND Flash (Expandable)

Micro SD slot (default boot device)

Standard SD slot*-1 Port

SATA 2.0 - 2 Ports

Communication Interfaces:

Gigabit Ethernet - 1 Port
(through expansion card)

USB 2.0 Host - 1 Port/3 Ports*

USB 2.0 device - 1 Port

PCIe 2.0 x 2 Lane - 1 Port

RS232 Debug Console - 1 Port

Video OUT:

7"LCD with 4 Resistive Touch

HDMI 1.3 - 1 Port

Connectivity:

802.11b/g/n Wi-Fi*

Mini PCIe Connector

Expansion Connector-1*:

GMII Interface, FF UART, GPIOs,
Multichannel Audio Interface

Miscellaneous Headers⁺:

UART Header

SPI Header

Analog HD & SD Video Out Headers

Temperature:

0 to 60°C

Form Factor:

Nano ITX 120x120mm

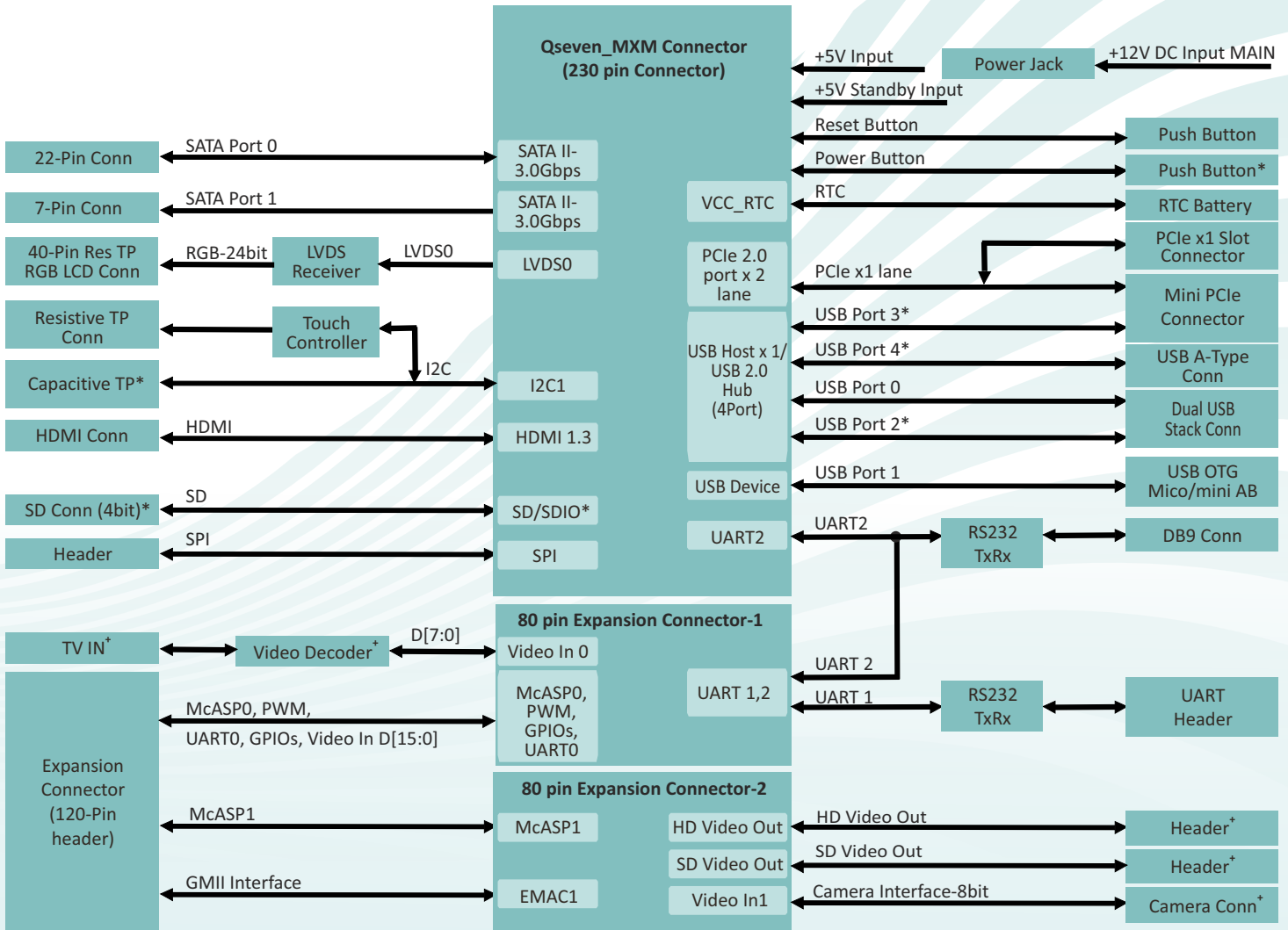
Power Input:

12V @ 2A DC Input

* Optional items are not supported by default

+ Foot prints only

DM816x Qseven DEVELOPMENT BOARD BLOCK DIAGRAM



* Optional
 + Foot prints only

OS Support

Linux 2.6.37

Deliverables

RainboW-G12D Platform
 Gigabit Ethernet Expansion Card
 Board Support Packages
 Power Adapter, User Manual

Optional Add On Modules

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.

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*Optional items not included in the standard deliverables

Ordering the DM816x Qseven Development Board

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

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