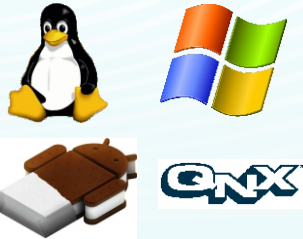
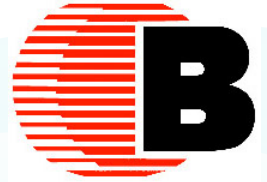


Development Platform RainboW-G15D-Q7 i.MX6 Qseven Development Kit



The Development Platform incorporates Qseven compatible i.MX6 SOM which is based on Freescale's i.MX6 Series 1.0GHz multimedia focused processor and Generic Qseven 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.MX6 CPU features.

APPLICATIONS : Industrial HMI, Automotive IVI, Video & Navigation, Graphical Instrument Clusters, Portable Medical Devices, Intelligent Industrial Control Systems and Home Energy Management Systems



iW-RainboW-G15D-Q7 HIGHLIGHTS

Ideal for Quick Proof of concept (POC) development.

Shortens 60% of the new product development life cycle

Suitable for validation of any R1.2 Qseven compatible module

Quick customization services in a very shorter period

SPECIFICATIONS

i.MX6 CPU Module:

i.MX 6 Quad/Dual/Solo CPU
ARM@Cortex™-A9 core @1GHz
2D/3D GPU (OpenGL ES 2.0, OpenVG 1.1)
Video Processing Unit(H.264, VC1, Rv10 etc)
RAM: 512MB/1GB DDR3 RAM (Expandable)⁺
Storage:
MicroSD
4GB eMMC Flash (Expandable)

Storage:

SATA 3.0 - 1Port
Standard SD/MMC or
WiFi(WYSAAVDX7) -1 Port

Communication Interfaces:

Gigabit Ethernet - 1 Port
USB 2.0 Host - 2 Ports
USB 2.0 OTG - 1 Port
USB Debug Port (Serial to USB conversion)
UART - 2 Ports
4 Wire Resistive Touch
CAN - 2 Ports
4 Port PCIe Gen2.0 Switch:
PCIe x 1 Slot
Mini PCIe Slot
- PCIe Interface
- USB Host Interface
- IIM Interface
- SMB Interface
PCIe to USB 3.0 Controller
- USB 3.0 Host - 2 Ports

Power Input:12V@ 2A DC Input

Sensors:

3-Axis Accelerometer
Digital e-Compass
Ambient Light Sensor
Altimeter/Barometer
Audio and Video:
Ac'97 codec- Audio IN/OUT Jacks
TV-IN RCA Jack (NTSC/PAL Input)
Parallel Camera ZIF Connector- CSI1 (8Bit)
MIPI Camera Connector
LVDS1 - 7" 800x480 Display with Capacitive TP
Backlight PWM Control
HDMI v1.4 - Port
LVDS-2 Connector

On-Board Headers:

10 Pin JTAG Header (Optional)
SPI Header
4x4 Keypad Interface Header
RTC Coin cell Holder

120 Pin Expansion Connector Interface:

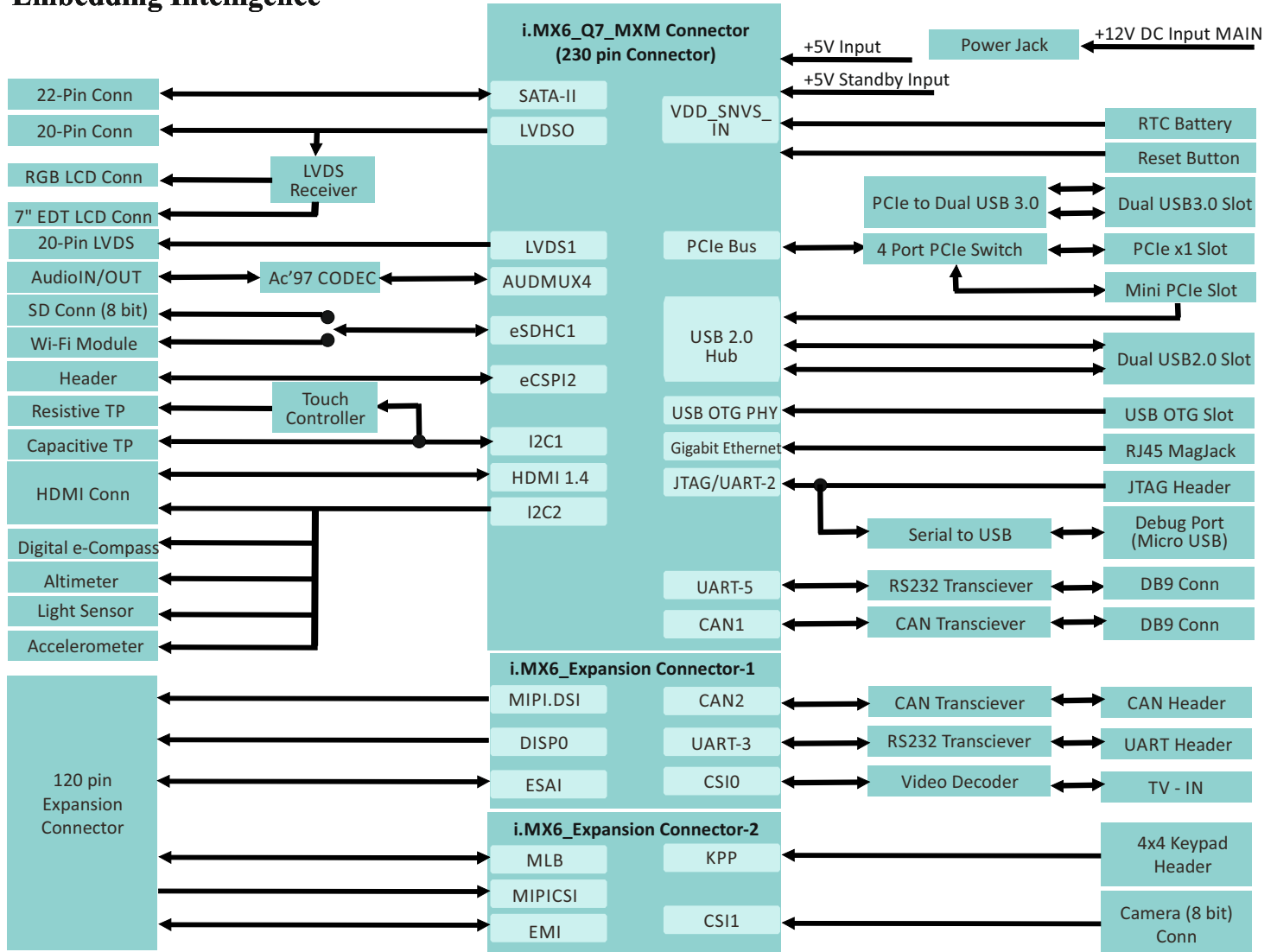
24bpp RGB LCDIF
ESAI
MIPI-DSI
MIPI-CSI
CSI2 (8 Bit)
Memory Interface (Address/Data Muxed)
MLB (Supported only in Automotive CPU)

Operating Temperature: 0 to 60°C

Form Factor: Nano ITX 120mmx120mm

⁺ 512MB DDR3 supported for i.MX6 Solo SOMs and for other CPU configurations 1GB DDR3 is supported

i.MX6 Qseven DEVELOPMENT BOARD BLOCK DIAGRAM



OS SUPPORT

Linux Kernel 3.0.35
 Android 4.0.4
 WEC7
 QNX 6.5.0*
 * Optional

DELIVERABLES

RainboW-G15D-Q7 Platform
 Board Support Packages
 Power Adapter
 User Manual

OPTIONAL ADD ON MODULES

Camera Add On Module
 24BPP LCD Add On Module
 Wi-Fi Add On Module
 3G and GPS 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 i.MX6 Qseven Development Board

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