

Development Platform iW-RainboW-G17D-Q7 Cyclone V SoC Qseven Development Board



iWave Systems launched Cyclone V SoC Development Kit – iW-RainboW-G17D equipped with Cyclone V SoC based Qseven SOM and generic Qseven carrier card for the increased system performance requirements. The Dual ARM Cortex A9 core with the FPGA allows greater flexibility for the system designers and helps to lower the system cost and power consumption. The improved logic integration with integrated high speed transceivers and hard memory controllers provides increased bandwidth capacity which is ideal for costsensitive high end applications.

APPLICATIONS: Industrial Automation, Smart Energy Systems, Video Surveillance, Defence & Aerospace, Mobile, Ultra Mobile, Automotive - Telematics, Medical Instrumentation



iW-RainboW-G17D-Q7 HIGHLIGHTS

ARM Cortex A9 Dual core CPU integrated with FPGA with up to 110K LEs

Enhanced with integrated transceivers and hard memory controller

Readily available FPGA IP cores for integration

Ideal for Quick Proof of concept (POC) development

Shortens 60% of the new product development life cycle

Quick customization services

SPECIFICATIONS

Cyclone V SoC Qseven SOM
Cyclone V SoC 5CSXFC6
512MB HPS DDR3 RAM
256MB FPGA DDR3 RAM
10/100/1000 Ethernet PHY
4 Port USB2.0 HUB
On SOM µSD Slot*
JTAG Header for FPGA
RTC Controller
OS: Linux 3.10

Qseven Carrier Board
Standard SD/MMC - 1 Port (Boot & OS Storage)
SATA 3.0 - 1 Port [#]
Debug Console through Micro USB
Data UART - 1 Port
CAN – 1 Port
USB 2.0 Host - 3 Ports
10/100/1000 Ethernet - 1 Port
PCIe x1 Slot
AC'97 codec- Audio IN/OUT Jacks [#]
LVDS – 2 Ports
7" TFT Display (800x480) with Capacitive Touch
2nd LVDS Connector
PWM
JTAG Header*
Operating Temperature: 0 to 55°C
Form Factor: Nano-ITX (120mmx120mm)
Power Input: 12V

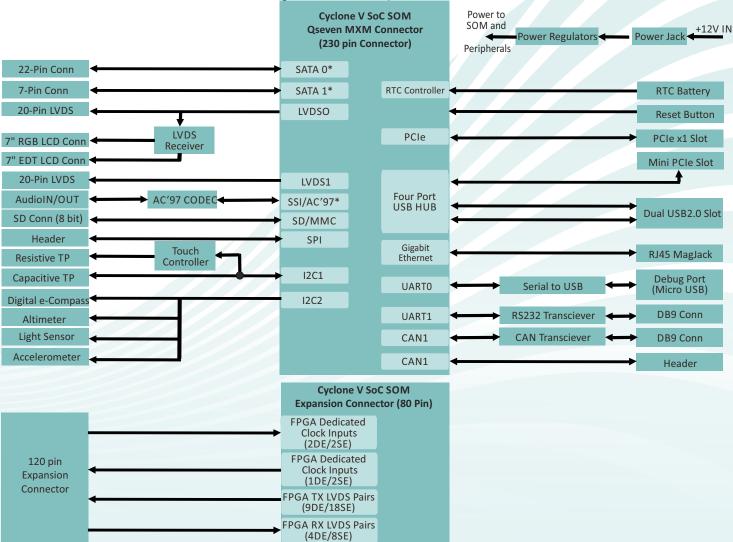
^{*}Optional items are not supported by default

Only Hardware support is provided by default





Cyclone V SoC Qseven DEVELOPMENT BOARD BLOCK DIAGRAM



OS SUPPORT

Linux Kernel 3.10

DELIVERABLES

iW-RainboW-G17D-Q7 Platform Board Support Packages Power Adapter User Manual

OPTIONAL KITS

iW-RainboW-G17M-Q7 (Cyclone V SoC Qseven SOM)

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 are not supported by default

Ordering the Cyclone V SoC Qseven Development BoardThe board can be ordered online from the iWave Website

http://www.iwavesystems.com/webforms

.td., iWave Japan, Inc.

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

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

www.iwavesystems.com
Downloaded from Arrow.com.