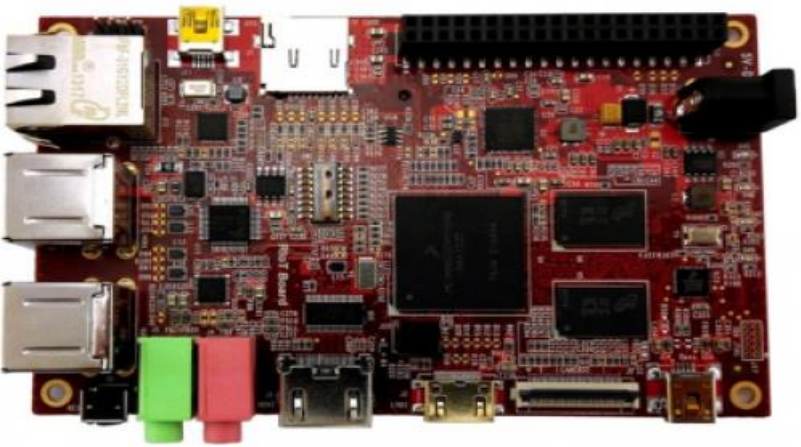
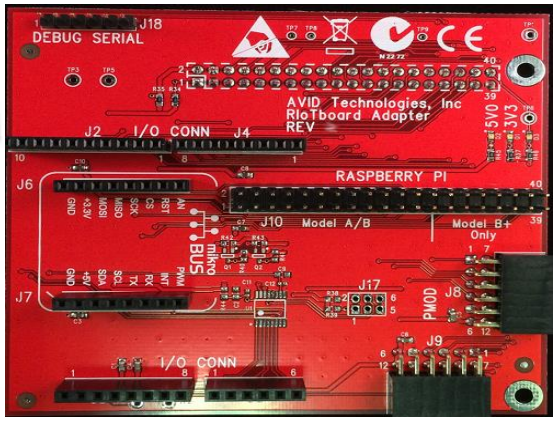
ELEMENT14 **RIOTBOARD STARTER KIT**

element14



RIoTBoard



RIoT Adapter

4.3 LCD MODULE AND ADAPTER BOARD

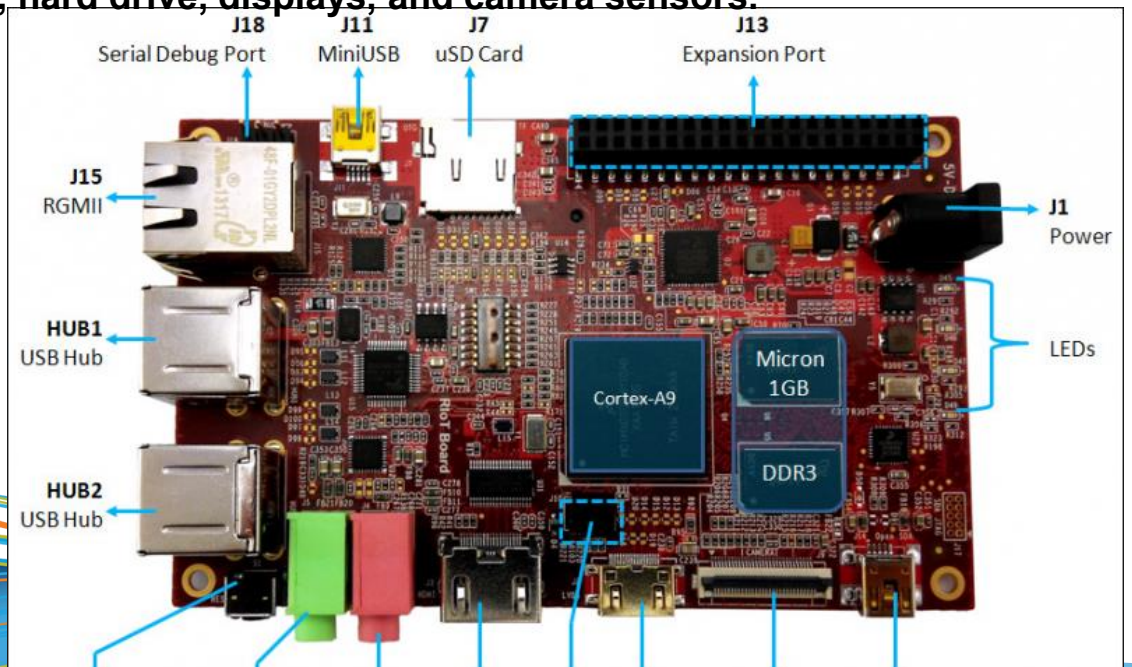
WiFi Dongle

RIoT intermediate kit	Supplier	MPN	Kit Quantity
RIoTboard	RIOTBOARD	MCIMX6 SOLO	1
Enclosure	BUD IND	BG-32618	1
Power Supply	TRIAD Magnetics	WSU050-2000	1
RIOTBOARD DAUGHTER CARD ADAPTER	RIOTBOARD	RIOT-ADAPTER	1
4.3" Display Riot Xplained	element14	LCD8000-43T-EX1	1
WIFI board BBB riot Xplained	element14	WIFI_DONGLE	1
HDMI CABLE	Molex	68786-0001	1

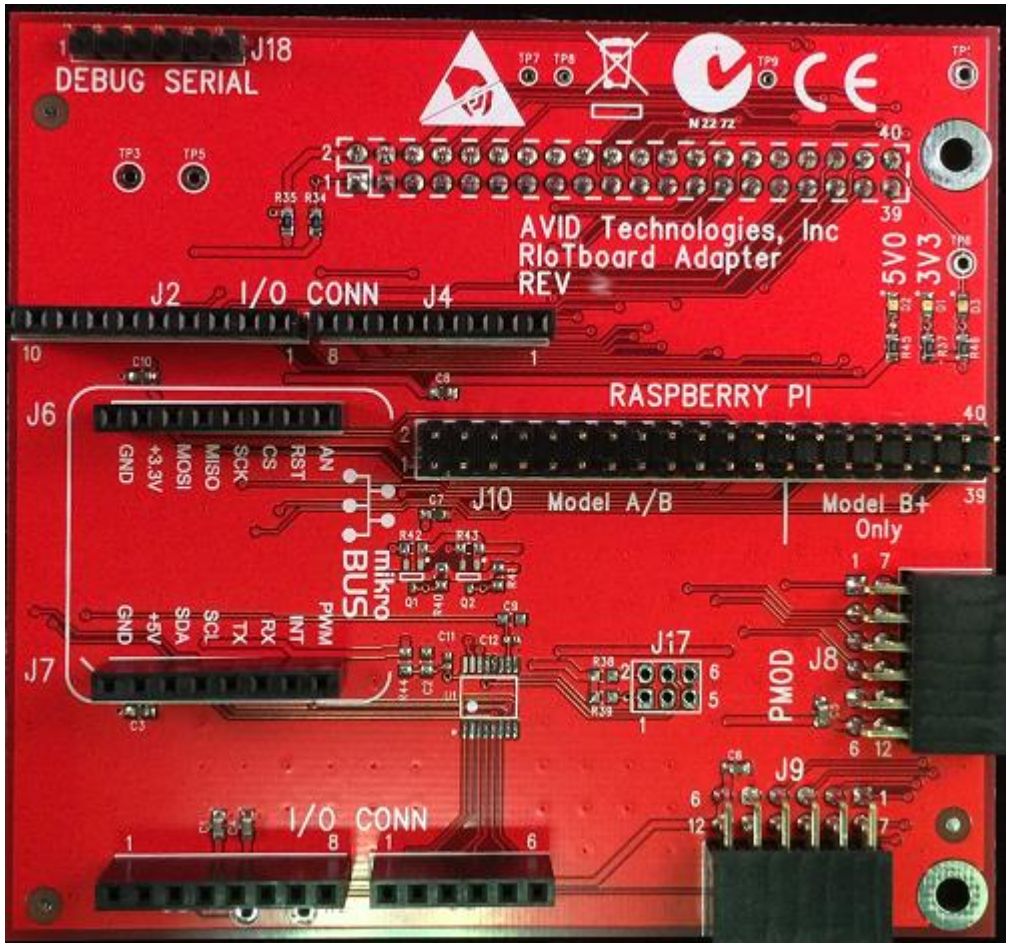
“Board-ganizer” Enclosure

The RIoTboard is an open source platform based on an ARM Cortex-A9 processor. The RIoTboard is an evaluation platform featuring the powerful i.MX 6Solo, a multimedia application processor with ARM Cortex-A9 core at 1 GHz from Freescale Semiconductor. The platform helps evaluate the rich set of peripherals and includes a 10/100/Gb Ethernet port, HDMI v1.4, LVDS, analog headphone/microphone, uSD and SD card interface, USB, serial port, JTAG, camera interface, GPIO boot configuration interface, and expansion port.

The i.MX 6Solo processor represents Freescale Semiconductor's latest achievement in integrated multimedia applications processors, which are part of a growing family of multimedia-focused products that offer high performance processing and are optimized for lowest power consumption. The processor features Freescale's advanced implementation of the single ARM™ Cortex-A9 core, which operates at speeds up to 1 GHz. It includes 2D and 3D graphics processors, 3D 1080p video processing, and integrated power management. The processor provides a 32/64-bit DDR3/LVDDR3-800 memory interface and a number of other interfaces for connecting peripherals, such as WLAN, Bluetooth™, GPS, hard drive, displays, and camera sensors.



RIoTBoard Adapter



The RIoTboard Adapter is an add-on extension for the RIoTboard host platform board. It is a simple, fully passive interface adapter that allows for the connection of a variety of accessory types to the RIoTboard.

The RIoTboard Adapter provides a key tool for expanding the RIoTboard platform eco-system. This adapter will make possible the connection and interface of many existing accessories not currently enabled for use with RIoTboard. The adaptor will help make the RIoTboard an even more popular platform due to many more accessory choices now possible.

As the RIoT has a unique non-standardized expansion GPIO port (P1), there are very few accessories designed that directly connect to the RIoTboard today. The RIoTboard Adapter allows users the ability to interconnect accessories from a wide range of prominent accessory types: Arduino shields, MikroE Clicks, Pmods, RPi accessories, etc., thus enhancing the overall value of the RIoTboard platform.

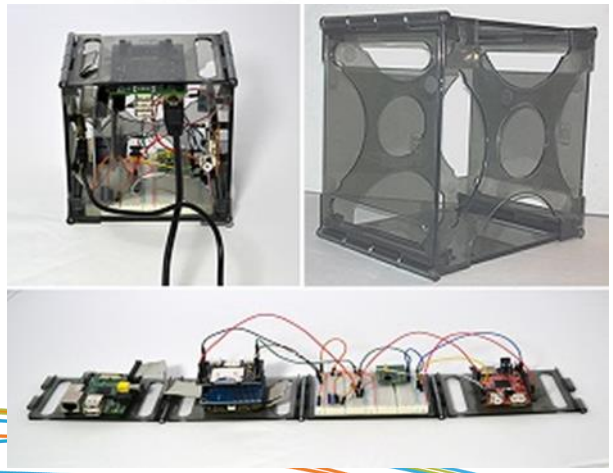
The RIoT Adaptor is intended to provide the physical interface connections between the RIoT host and the various accessories supported. It does NOT address the firmware aspects of interfacing various accessories to RIoTboard. The RIoTboard Adapter is just one piece of RIoTboard + Accessory enablement. It enables physical connectivity.

4.3 LCD MODULE AND ADAPTER BOARD

The **LCD8000-43T-EX1** assembly is a TFT-LCD module with a 16/24-bit RGB parallel conversion board (LCD-Ex). The conversion board is integrates a TSC2046 chip for touch function and a 3.3V regulation chip with capability to implement I2C control and PWM backlight control. It supports 16-bit and 24-bit driving modes for LCD displays, as well as connecting SPI 4-wire resistive touch-screen.

WiFi Dongle

The WIFI_Dongle is a high performance and cost effective WLAN USB module which connects your development platform to a wireless local area network. It has greater bandwidth making data transmission more efficient, whilst also supporting wireless roaming, ensuring a consistent wireless connection. WIFI_Dongle uses the latest channel detection technology, enhancing wireless performance.



BUD Board-ganizer multi-development board enclosure kit

The board-ganizer is a unique work space organizing platform designed to serve the rapidly growing community of electronics makers and developers. The innovative enclosure lets the user combine and mix boards with no need for additional hardware. The boards are attached using specially developed adhesive backed rubber feet

TRIAD MAGNETICS

2A, 5V Power Supply

Molex

HDMI CABLE