

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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#### PICO-IMX6-EMMC

# **Key Features**

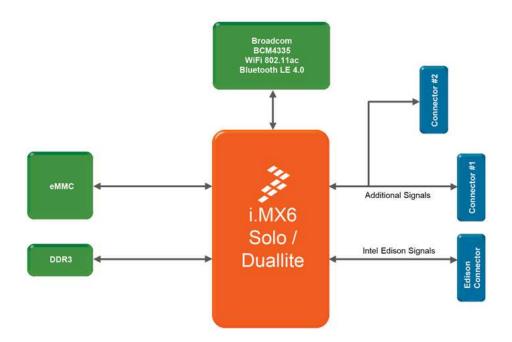
The PICO-IMX6-EMMC reference design based on the Freescale i.MX6 multimedia processor is a purpose-built, small footprint hardware platform equipped with a wide array of high-speed connectivity engineered to support IoT endpoints, wearable applications, appliances, drones or industrial mobile terminals.

The affordable reference design is compatible with Intel Edison baseboards and adds a number of additional high-speed signals such as PCIe, RGMII LAN, USB as well as 24 bit TTL Display, LVDS, HDMI and MIPI CSI Camera and MIPI DSI Display options.

The PICO-IMX6-EMMC combines outstanding detailed documentation and design files to integrate the module into your designs with support for Linux 3.x kernel sourcecode and has recipes for Yocto, Ubuntu and Android 4.3/4.4/5.0 available.



# PICO-IMX6-EMMC Block Diagram



### **Specifications**

Processor Technology System Memory Storage

Operation System

Freescale i.MX6 Solo / Duallite ARM Cortex-A9 single/dual core @ 1Ghz 512MB or 1GB DDR3

onboard eMMC (default 4GB)

Linux 3.x, Yocto, Android 4.3, Android 4.4, Android 5.0, Ubuntu

Connectivity

Gigabit Network RGMII

Signals routed to board-to-board connector

Wireless LAN Broadcom BCM4335 802.11ac
Bluetooth Broadcom BCM4335 Bluetooth v. 4.0

### Connectors

Board-to-Board 1x Intel Edison compatible connector (Hirose 70-pin)

2x Hirose 70-pin connectors

### I/O Interface Signalling

Edison I/O @ 1.8V 9x GPIO

4x PWM 2x I<sup>2</sup>C 1x I<sup>2</sup>S 1x SPI 2x UART USB-OTG SDIO (4-bit)

Additional I/O @ 3.3V Single Channel LVDS

24-bit TTL RGB HDMI 1.4 MIPI CSI Camera MIPI DSI Display PCIe

RGMII (gigabit LAN)

Flex CAN version 2.0B Compliant

# Video

GPU 3D Vivante GC880

35Mtri/s 266Mpxl/s Open GL ES 2.0 Emulated on GPU 3D

GPU 2D
(Vector Graphics)

(Vector Graphics)

 GPU 2D
 Vivante GC320

 (Composition)
 600Mpxl/s, BLIT

 Video Decode
 1080p30 + D1

 Video Encode
 1080p30 H.264

 BP / Dual 720p

## Audio

Weight

Interface I²S (1 channel)
Audio Codec On Carrier Board

#### **Power Specifications**

Input Power Requirements  $3.3 \sim 4.5 \text{ VDC}$ 

#### **Environmental and Mechanical**

Temperature Commercial :  $0^{\circ}$  to  $60^{\circ}$  C

Extended : -20° to 70° C

Industrial: -40° to 85° C (no WiFi possible)

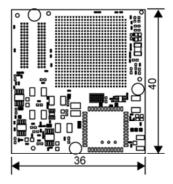
 $\begin{array}{ccc} \text{Humidity} & 10 - 90\% \\ \text{Dimensions} & 36 \times 40 \text{ mm} \\ & 1 \% \times 1 \% \text{ inch} \end{array}$ 

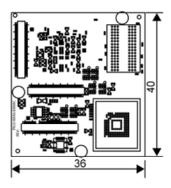
1% x 1% inc 8 grams

Certification Compliant with CE, FCC, RoHS, REACh directives

# **Dimensional Drawing**

All dimensions are in mm





# **Ordering Information**

# PICOIMX6S10R512NI4GBW

 $PICO\text{-}IMX6\text{-}SD\ Module\ with\ i.MX6\ Solo\ Processor,\ 512MB\ DDR,\ 4GB\ eMMC\ and\ WiFi\ /\ Bluetooth\ PICOIMX6U10R1GBNI4GBW$ 

 $PICO\text{-}IMX6\text{-}SD\ Module\ with\ i.MX6\ Duallite\ Processor,\ 1GB\ DDR,\ 4GB\ eMMC\ Flash\ and\ WiFi\ /\ Bluetooth$