

# **Single Board Computer RainboW-G15S**

# i.MX6 Dual Lite / Solo Pico ITX SBC



iWave's new i.MX6 Dual Lite/Solo based Pico ITX SBC integrates all standard interfaces into a single board with ultra compact yet highly integrated platform that can be utilized across multiple embedded PC, system and industrial designs. It has got all the necessary functions that the embedded world demands on a single board. It also provides an expansion header through which interfaces can be used according to their applications. Measuring just 100mm x 72mm, the Pico-ITX is currently the smallest complete ARM Cortex A9 main board in the industry, smaller than all existing ATX, BTX and ITX form factors.

**APPLICATIONS:** Intelligent Industrial Control Systems, Industrial Human-Machine interface, Ultra Portable Devices, Home Energy Management Systems, Portable Medical Devices

Debug & Status Indication Support:



# iW-RainboW-G15S HIGHLIGHTS

ARM Cortex A9@ 1GHz Dual Lite/Solo core

10cm x 7.2cm Pico-ITX form factor Single Board Computer

HD 1080p encode and decode

3D video playback in high definition

Includes HDMI v1.4, MIPI and LVDS display ports, MIPI camera, Gigabit Ethernet, multiple USB 2.0 and PCI Express

Comprehensive security features include cryptographic accelerators, high-assurance boot and tamper protection

Technical &quick customization support 5+ years, Long term support

## **SPECIFICATIONS**

CPII:

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i.MX 6 Dual Lite/Solo, (Quad/Dual compatible)	Micro USB Debug Port
RAM:	Optional JTAG Header*
512MB DDR3 (Expandable up to 2GB)	4 Pos User Dip Switch &Status LEDs
Storage:	Expansion Header-84 Pin:
On-board Micro SD Slot	MIPI DSI
Standard SD/SDIO Slot	SPI Interface-1No
Optional eMMC Support*	CSIO Camera interface
Optional SATA 7 Pin Connector <sup>+</sup>	CAN2 Interface
Communication Interfaces:	UART- 3 Nos
10/100/1000 Mbps Ethernet	12C- 3 Nos
Half mini PCle card Connector	GPIOs
Dual USB Host Connector	Optional LVDS1 interface <sup>+</sup>
Micro USB OTG Connector	Optional MLB interface <sup>+</sup>
CAN Header	Operating Temperature: -20°C to +85°C
Audio & Video Interfaces:	Power Input: 5V, 2A
AC97 Audio Codec with Audio Out Jack & Audio In Header	Form Factor:
HDMI Port	Pico ITX (100mm x 72mm)
LVDS Connector with Backlight & Resistive	Operating Systems:
Touch Connector Support	Linux 3.0.35
8 Bit CMOS Camera Connector	Android 4.0.4*
2 Lanes MIPI Camera Connector	WEC7*

<sup>\*</sup>Optional features not supported by default

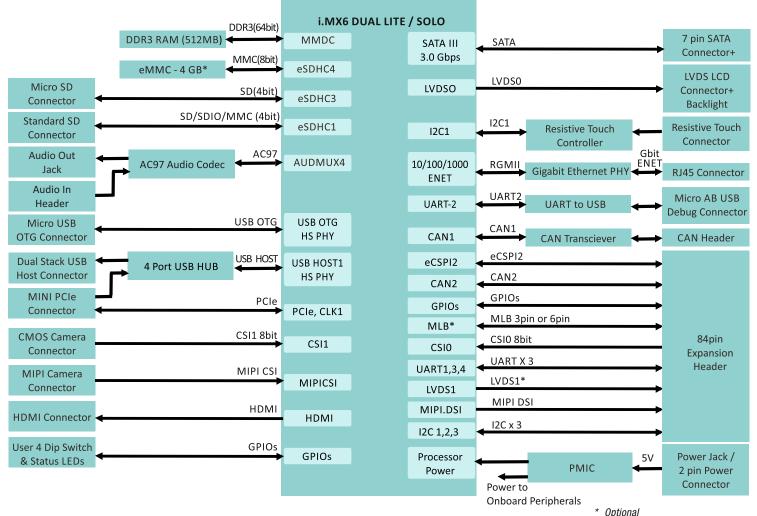
<sup>&</sup>lt;sup>†</sup>Supported by the iMX6 Quad/Dual based SBC







# i.MX6 DUAL LITE / SOLO PICO ITX SBC BLOCK DIAGRAM



Not Available for Dual Lite / Solo

#### **OS SUPPORT**

Linux 3.0.35 Android 4.0.4\* WEC7\*

\* Optional

## **DELIVERABLES**

i.MX6 Pico ITX SBC Board Support Packages 5V @ 2A Power Adapter User Manual

### **OPTIONAL ADD ON MODULES**

Coming Soon\*

### **CUSTOM DEVELOPMENT**

BSP Development/OS Porting Custom Application/GUI Development Design Review and 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