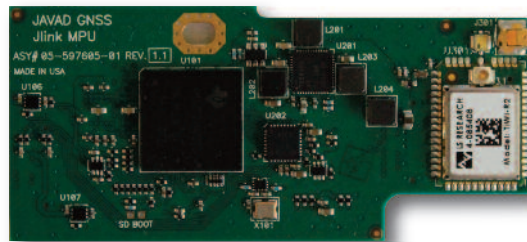




## JLink MPU



JLink MPU is a high performance, highly integrated, compact, low power consumption and low cost System-on-Module. It provides an ideal building block that easily integrates with a wide range of target markets, such as industrial control and other applications requiring reach connectivity features as well as high-processing power. Jlink MPU module is designed for industrial use and makes your market advancement more simple and fast. The module can be used in extremely low and high temperatures in a wide spectrum of Network applications.

This OEM module is designed for local Bluetooth/WiFi networks and has the ability to connect an external 4G/3G cellular modem (via USB). The module has a high-performance processor which allows implementing sophisticated network applications based on the Linux OS. The wide range of interfaces (Ethernet, USB Device and Host, UARTs, I2C) allows you to connect to the JLink MPU all kinds of sensors.

# JLink MPU

## Processor

TIAM3352 ARM® Cortex™-A8 32-Bit RISC up to 720 MHz  
Memory 256MB LPDDR, 256MB FLASH NAND

## Interfaces

1 x USB/OTG, 1 x USB Host  
2 x UART (3.3V logic level)  
1 x I<sup>2</sup>C (3.3V logic level)  
12 x GPIO  
1 x 10/100Mbps Ethernet port (External Ethernet Transformer is necessary)  
1x Micro-SD card slot

## Wireless interfaces

TIWi-R2 (TI WL1271 chipset) module is a high performance 2.4 GHz  
IEEE 802.11 b/g/n, Bluetooth 2.1 (onboard connector for external antenna)

## Sensor

LM73 Digital Temperature Sensor

## Software:

Linux for ARM (Kernel 3.2)

## Boot

NAND / Micro-SD card as boot device

## Power

+(3.6 ... 4.4)V, 1 A max

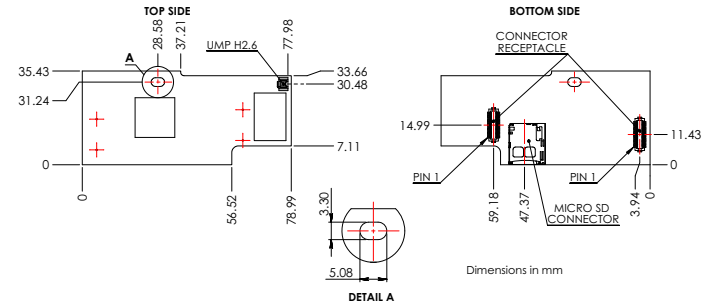
## Temperature

Operating: -40°C - +85°C

Storage: -40°C - +85°C

Humidity: 10-85% non-condensing

## Dimensions



## Connectors

J201 Micro SD card holder

J202 connector (HIROSE DF12-40DS-0.5V)

J203 connector (HIROSE DF12-40DS-0.5V)

J301 RF connector: UMP SMT Receptacle. Height 2.6mm. (Radial R107 103 020)

## J202 connector

Pin #	Signal Name	I/O	Description
1	GND	-	Ground
2	USB1_DP	I/O	USB data plus (HOST) for GSM Modem
3	GND	-	Ground
4	USB1_DM		USB data minus (HOST) for GSM Modem
5	GND	-	Ground
6	USB1_VBUS		USB 5V Output (HOST) for GSM Modem
7	GND	-	Ground
8	GPIO3_8/GSM_ON_OF		GSM Modem ON/OFF logical signal (3V3 level)
9	GND	-	Ground
10	GPIO3_7/GSM_SHDN		GSM Modem SHDN logical signal (3V3 level)
11	GND	-	Ground
12	GPIO2_1/GSM_ON_FLG	I	GSM Modem ON_FLG logical signal (1V8 level)
13	GND	-	Ground
14	UART1_RXD	I	UART1 data input (3V3 level)
15	GND	-	Ground
16	UART1_TXD	O	UART1 data output (3V3 level)
17	GND	-	Ground
18	UART1_CTSN	I	UART1 clear to send (3V3 level)
19	GND	-	Ground
20	UART1_RTSN	O	UART1 request to send (3V3 level)
21	GND	-	Ground
22	GPIO0_20	I/O	GPIO (3V3 level)
23	GND	-	Ground
24	GPIO3_19	I/O	GPIO (3V3 level)
25	GND	-	Ground
26	GPIO3_20	I/O	GPIO (3V3 level)
27	GND	-	Ground
28	GPIO3_21	I/O	GPIO (3V3 level)
29	4V0	I	+4.0 VDC Power Input
30	I2C1_SDA	I/O	I2C data (3V3 level)
31	4V0	I	+4.0 VDC Power Input
32	I2C1_SCL	O	I2C clock (3V3 level)
33	4V0	I	+4.0 VDC Power Input
34	4V0	I	+4.0 VDC Power Input
35	4V0	I	+4.0 VDC Power Input
36	4V0	I	+4.0 VDC Power Input
37	4V0	I	+4.0 VDC Power Input
38	4V0	I	+4.0 VDC Power Input
39	4V0	I	+4.0 VDC Power Input
40	4V0	I	+4.0 VDC Power Input

## J203 connector

Pin #	Signal Name	I/O	Description
1	GND	-	Ground
2	UART0_RXD	I	UART0 data input
3	GND	-	Ground
4	UART0_TXD	O	UART0 data output
5	GND	-	Ground
6	UART0_CTSN	I	UART0 clear to send
7	GND	-	Ground
8	UART0_RTSN	O	UART0 request to send
9	GND	-	Ground
10	GPIO2_22	I/O	GPIO (3V3 level)
11	RESERVED		Do not connect
12	GPIO2_23	I/O	GPIO (3V3 level)
13	RESERVED		Do not connect
14	GPIO2_24	I/O	GPIO (3V3 level)
15	RESERVED		Do not connect
16	GPIO2_25	I/O	GPIO (3V3 level)
17	RESERVED		Do not connect
18	GPIO3_18	I/O	GPIO (3V3 level)
19	RESERVED		Do not connect
20	GND	-	Ground
21	RESERVED		Do not connect
22	USB0_VBUS	I/O	USB 5V Output (HOST) or Input (DEVICE)
23	RESERVED		Do not connect
24	USB0_VBUS	I/O	USB 5V Output (HOST) or Input (DEVICE)
25	RESERVED		Do not connect
26	USB0_ID	I	USB0_ID signal
27	RESERVED		Do not connect
28	RESERVED		Do not connect
29	RESERVED		Do not connect
30	RESERVED		Do not connect
31	RESERVED		Do not connect
32	USB0_DP	I/O	USB0 data plus (HOST or DEVICE)
33	RESERVED		Do not connect
34	USB0_DM	I/O	USB0 data minus (HOST or DEVICE)
35	3V3	O	3V3 supply for Ethernet magnetic
36	ELED+	O	Ethernet LED Anode (+)
37	TD+	O	Ethernet Transmit Data Plus
38	RD+	I	Ethernet Receive Data Plus
39	TD-	O	Ethernet Transmit Data Minus
40	RD-	I	Ethernet Receive Data Minus

Specifications are typical and subject to change without prior notice

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