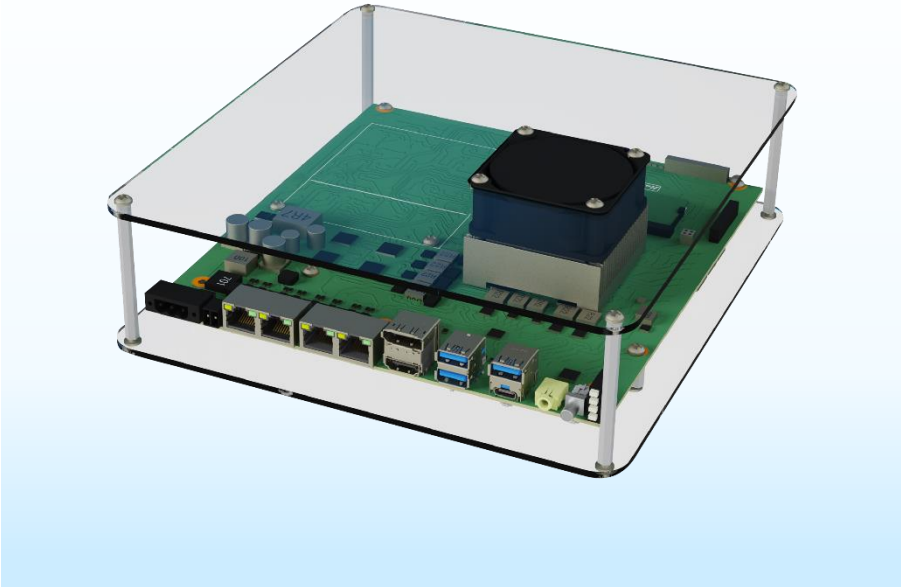


DK-2500

基于Intel® Core™ Ultra Processors

产品特性

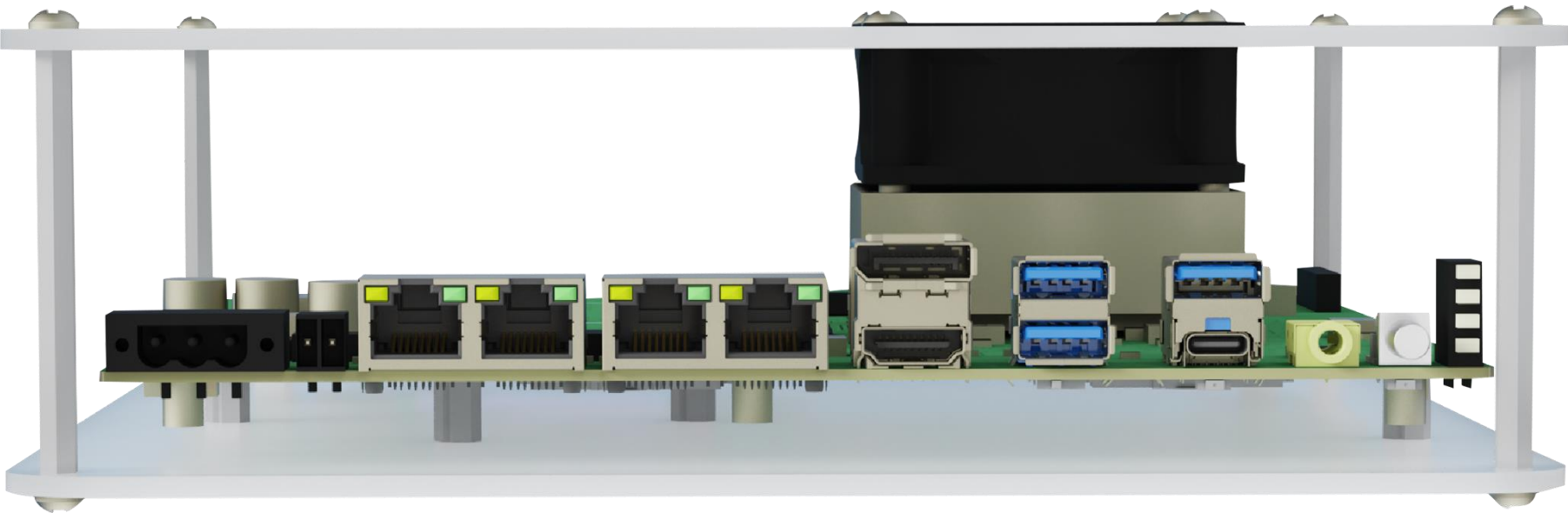
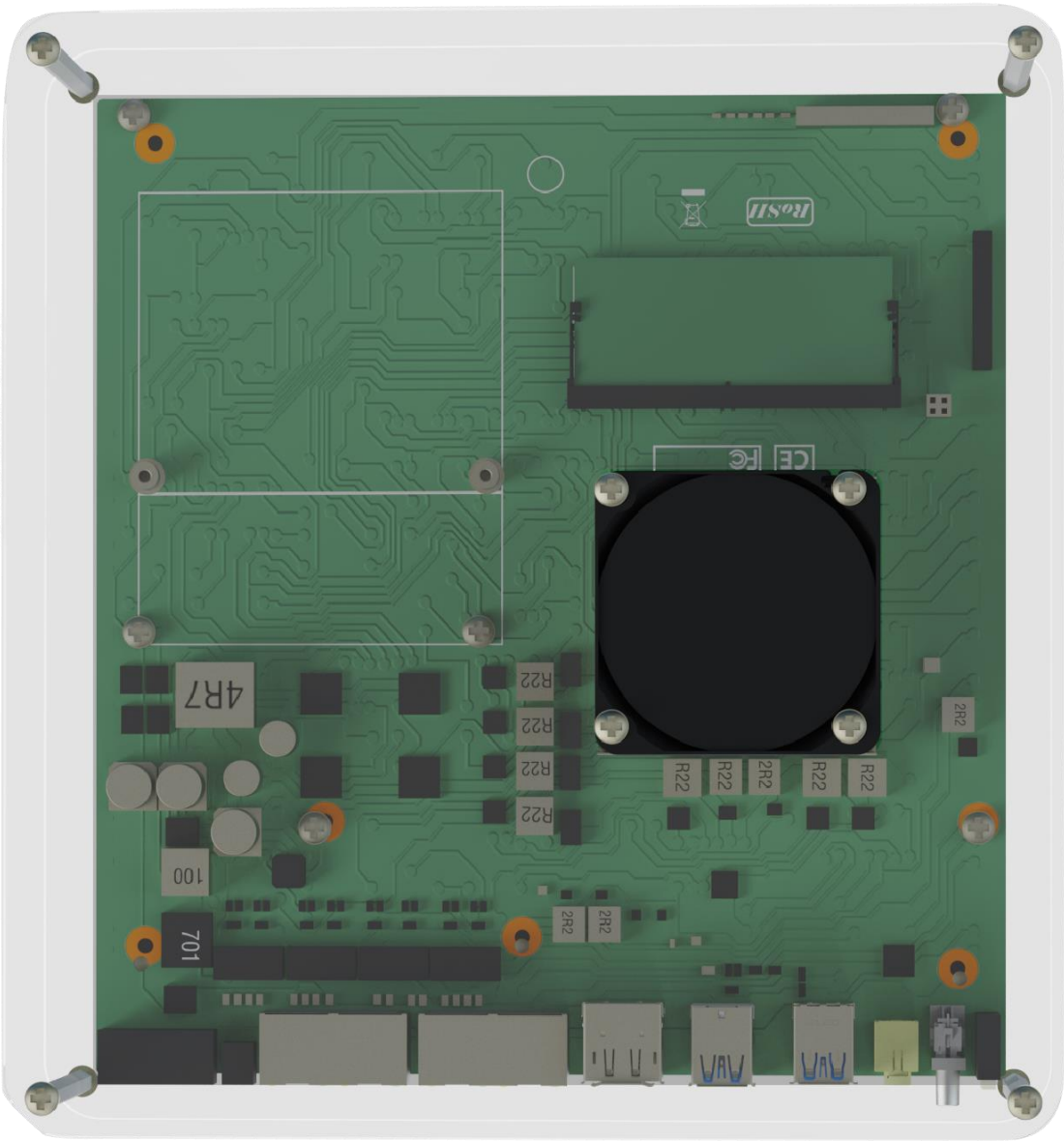
- Intel® Core™ Ultra 5 Processor 225U
- 16G SO-DIMM DDR5
- 128G SSD
- 显示接口: DP, HDMI, eDP/LVDS
- 4 GbE LAN ( Intel® Ethernet Controller I210-AT)
- 4 USB3.2
- 40-Pin JTAG 支持GPIO,PWM,UART,I2C,I2S,GSPI
- 支持4G/5G, Wi-Fi无线通讯模组扩展
- 板载TPM2.0
- 24V DC-in
- 200 x 215mm (L x W)
- Windows 10/11, ubuntu 20.04/22.04



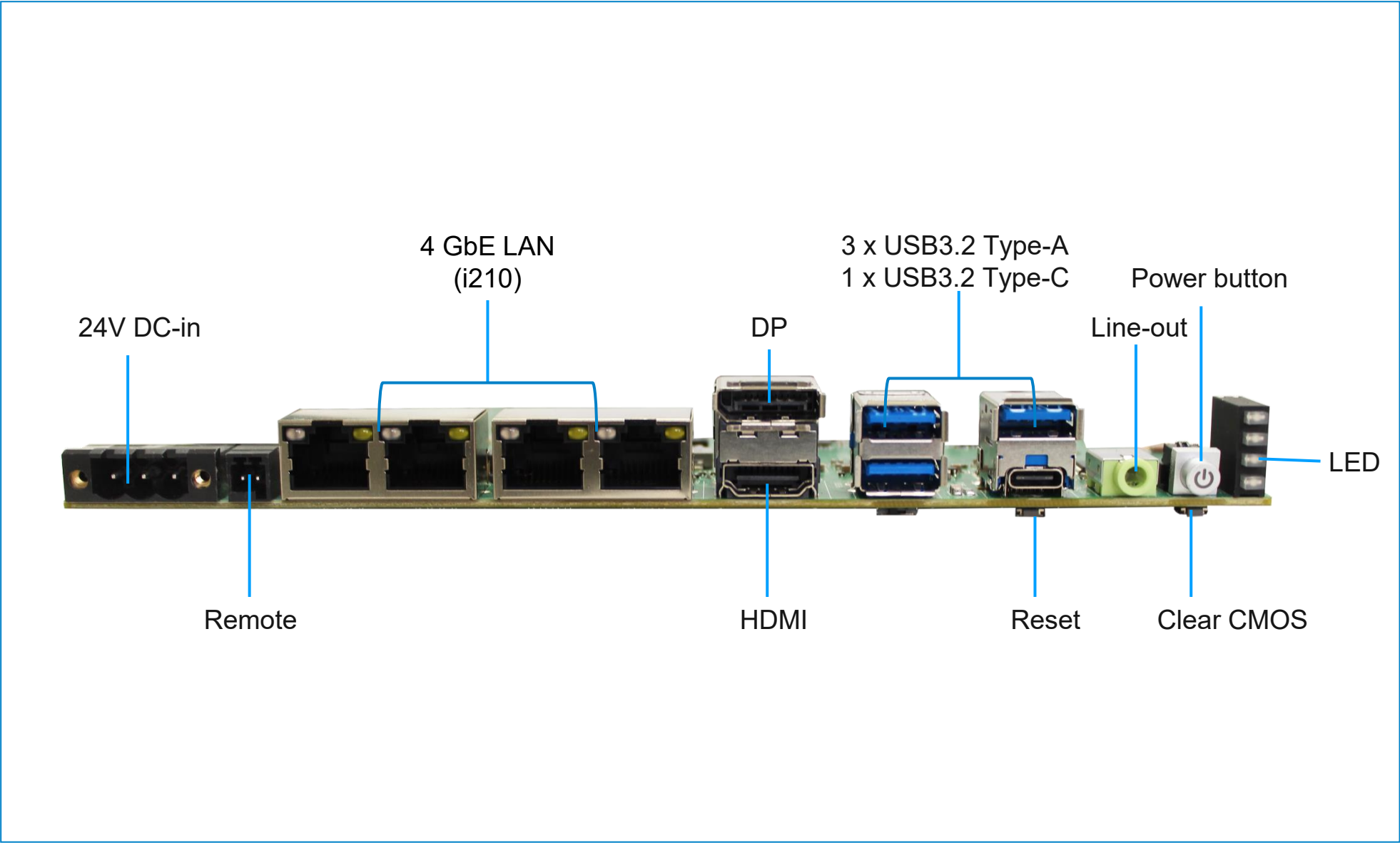
规格信息

| 属性     |              | 描述                                                                      |
|--------|--------------|-------------------------------------------------------------------------|
| 处理器系统  | CPU          | Intel® Core™ Ultra 5 Processor 225U                                     |
|        | 基础功耗         | 15W                                                                     |
|        | BIOS         | AMI 256Mbit SPI Flash                                                   |
| 内存     | 技术           | 双通道 DDR5 SO-DIMM                                                        |
|        | 容量           | 2*8GB                                                                   |
| 存储     | SSD          | 1 x M.2 2280 M-Key 128G SSD                                             |
| 图像     | GPU          | Intel® Graphics                                                         |
| 外设接口   | DP           | 1 x DP1.4a 分辨率高达4096 x 2160x 36bpp @60Hz                                |
|        | HDMI         | 1 x HDMI2.1分辨率高达4096 x 2304 @ 60Hz                                      |
|        | 以太网          | 4 x Intel i210 GbE LAN                                                  |
|        | USB 3.0      | 4 x USB3.2 (1 x USB Type-C , 3 x USB Type-A )                           |
|        | 音频           | 1 x Line-out                                                            |
|        | 电源输入接口       | 1 x 3位凤凰端子                                                              |
| 扩展接口   | LCD          | 1 x eDP1.4b 分辨率高达4096 x 2304 @ 60Hz;或 LVDS 单通道18/24-bit, 分辨率高达1920x1200 |
|        | CPU FAN      | 1 x CPU FAN                                                             |
|        | SYS FAN      | 1 x SYS FAN                                                             |
|        | SMBus        | 1 x SMBus                                                               |
|        | JTAG         | 1 x 40 contact pin (1*PWM 1*UART 1*I2C 1*I2S 1*GSPI)                    |
|        | RTC Battery  | 1 x RTC Battery                                                         |
|        | M.2 E-Key    | 1 x M.2 2230 E-Key (Wi-Fi/BT)                                           |
|        | M.2 B-Key    | 1 x M.2 3042/3052 B-Key (4G/5G)                                         |
|        | SIM          | 1 x NANO SIM                                                            |
|        | BTB连接器 (CON) | CON1 : 4 COM/3 PCIe/2 USB3.0/1 USB2.0;<br>CON2 : 4 PCIe/GPIO            |
| LED和开关 | LED          | 硬盘灯, 内存灯, 用户自定义灯1, 用户自定义灯2                                              |
|        | 电源开关按键       | 1 x Power button                                                        |
|        | 远程开关         | 1 x Remote                                                              |
|        | Clear CMOS   | 1 x Clear CMOS                                                          |
|        | 重启按键         | 1 x Reset                                                               |
| 其他     | Watchdog     | 65536 lever, 0~65535 sec                                                |
|        | TPM          | Onboard TPM2.0 (可选)                                                     |
| 电源     | 电源输入         | 24V±10% DC                                                              |
|        | 电源管理         | AT/ATX                                                                  |
|        | 最大功耗         | 60W                                                                     |
| 环境参数   | 工作温度         | 0 ~ 60 °C (32~140°F)                                                    |
|        | 存储温度         | -40~85 °C (-40~185°F)                                                   |
|        | 工作湿度         | 95% @ 40 °C(Non-Condensing)                                             |
|        | 存储湿度         | 95% @ 60 °C(Non-Condensing)                                             |
| 物理特征   | 尺寸           | 200 x 215mm (L x W)                                                     |
| 操作系统   | OS           | Windows 10/11, centos 8, ubuntu 20.04/22.04                             |

产品图片



接口示意图



订购信息

| Part Number | CPU  | Processor Base Power | Max. Frequency | Core | Thread | GbE | DP | HDMI | USB3.0 | JTAG   | M.2 | DC-Input |
|-------------|------|----------------------|----------------|------|--------|-----|----|------|--------|--------|-----|----------|
| DK2500-U001 | 225U | 15W                  | 4.8 GHz        | 12   | 14     | 4   | 1  | 1    | 4      | 30-PIN | 2   | 24V DC   |

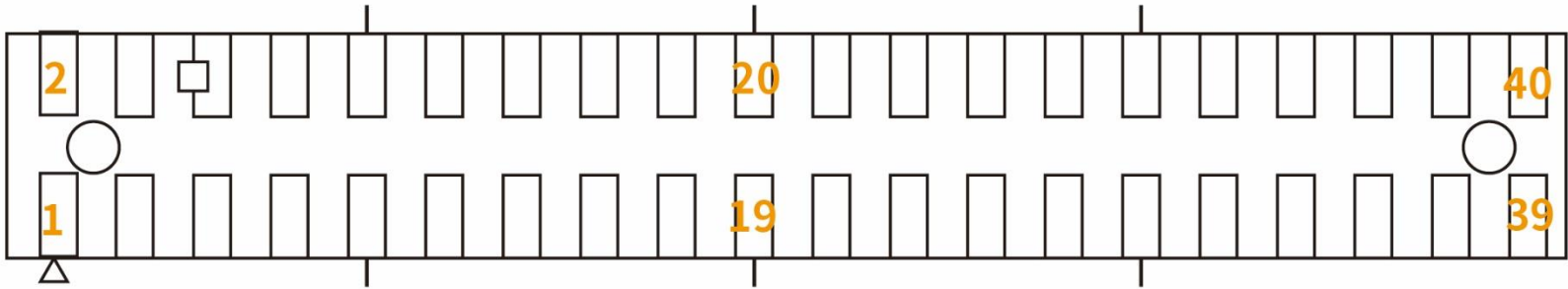
可选配件

| Part Number      | Description                                                              |
|------------------|--------------------------------------------------------------------------|
| MF0A000000000057 | WIFI+BT module M.2 2230 CNVi WiFi5 2.4G/5G 2x2 9560.NGWG.NV 957715 Intel |
| MF0A000000000078 | WIFI+BT module M.2 2230 CNVi WiFi6 2.4G/5G 2x2 AX201.NGWG Intel          |
| MF0A000000000042 | 5G LTE module, M.2 RM520NGLEA512F-M20-SGASA, Worldwide                   |
| MF0A000000000036 | 4G LTE module, M.2 EM05CEFC-128-SGAS, China                              |
| MF0A000000000066 | 5G LTE module, M.2 RM500UCNVEA512F-D10-SNADA EMEA/Asia-Pacific           |

包装清单

| Part Number       | Description           | Quantity |
|-------------------|-----------------------|----------|
| -                 | DK-2500 Dev.Kit       | 1        |
| ZM0A0000000000254 | Power Adapter         | 1        |
| KE0A000000000004  | Round head screws     | 4        |
| ZM0A000000000020  | Three-plug power cord | 1        |

调试接口PIN脚定义



| PIN | SIGNAL            | PIN | SIGNAL           |
|-----|-------------------|-----|------------------|
| 1   | 3.3V              | 2   | 5V               |
| 3   | I2C1_DAT/GPIO1    | 4   | 5V               |
| 5   | I2C1 CLK/GPIO2    | 6   | GND              |
| 7   | GPIO3             | 8   | UART TX(SIO)     |
| 9   | GND               | 10  | UART RX(SIO)     |
| 11  | RTS(SIO)          | 12  | I2S BCLK/ GPIO18 |
| 13  | GPIO5             | 14  | GND              |
| 15  | GPIO6             | 16  | GPIO19           |
| 17  | 1.8V              | 18  | GPIO20           |
| 19  | GSPI_MOSI         | 20  | GND              |
| 21  | GSPI_MISO         | 22  | GPIO21           |
| 23  | GSPI_CLK          | 24  | GSPICS0/GPIO22   |
| 25  | GND               | 26  | GPIO23           |
| 27  | I2C0_DAT / GPIO10 | 28  | I2C0_CLK/GPIO24  |
| 29  | GPIO11            | 30  | GND              |
| 31  | GPIO12            | 32  | PWM0 / GPIO25    |
| 33  | GPIO13            | 34  | GND              |
| 35  | I2S_SYNC/GPIO14   | 36  | CTS(SIO)         |
| 37  | GPIO15            | 38  | I2S SDI/ GPIO27  |
| 39  | GND               | 40  | I2S SDO/GPIO28   |