



QY-IMX6S-V1.2 Single Board Computer Hardware Manual

Version NO. : V 1.2
2013.11

| | | | |
|------------|----|----|------------|
| LVDS1_CLKP | 15 | 16 | GND |
| LVDS1_TXN3 | 17 | 18 | LVDS1_TXP3 |
| GPIO_3 | 19 | 20 | GPIO_4 |

J18: LCD Power supply interface

| PIN | Signal Name |
|-----|-------------|
| 1 | +12VD |
| 2 | GND |
| 3 | GND |
| 4 | +5.0VD |
| 5 | GND |
| 6 | +3.3VD |

J19: Capacitive touch panel interface

| PIN | Signal Name |
|-----|-------------|
| 1 | +3.3VD |
| 2 | I2C3_SDA |
| 3 | I2C3_SCL |
| 4 | GPIO_18 |
| 5 | GPIO_19 |
| 6 | GND |

J21: TTL LCD

| Signal Name | PIN | PIN | Signal Name |
|-------------|-----|-----|-------------|
|-------------|-----|-----|-------------|

| | | | |
|-------------|----|----|-------------|
| GND | 1 | 2 | DISP0_CLK |
| DISP0_HS | 3 | 4 | DISP0_VS |
| GND | 5 | 6 | DISP0_DAT18 |
| DISP0_DAT19 | 7 | 8 | DISP0_DAT20 |
| DISP0_DAT21 | 9 | 10 | DISP0_DAT22 |
| DISP0_DAT23 | 11 | 12 | GND |
| DISP0_DAT10 | 13 | 14 | DISP0_DAT11 |
| DISP0_DAT12 | 15 | 16 | DISP0_DAT13 |
| DISP0_DAT14 | 17 | 18 | DISP0_DAT15 |
| GND | 19 | 20 | DISP0_DAT2 |
| DISP0_DAT3 | 21 | 22 | DISP0_DAT4 |
| DISP0_DAT5 | 23 | 24 | DISP0_DAT6 |
| DISP0_DAT7 | 25 | 26 | GND |
| DISP0_DE | 27 | 28 | LCD_VDD |
| LCD_VDD | 29 | 30 | LCD_PWR |
| LCD_MOD | 31 | 32 | NC |
| LCD_CC | 33 | 34 | NC |
| GND | 35 | 36 | NC |
| NC | 37 | 38 | NC |
| NC | 39 | 40 | NC |
| TSC_XP | 41 | 42 | TSC_YP |
| TSC_XM | 43 | 44 | TSC_YM |

J22: Camera interface

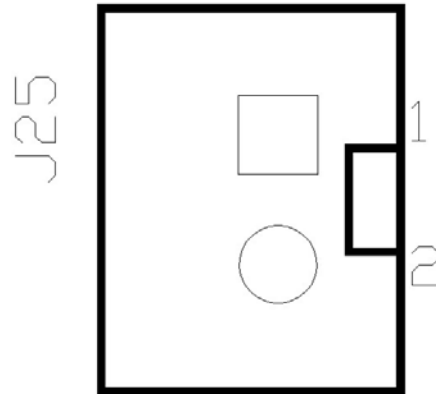
| Signal Name | PIN | PIN | Signal Name |
|-------------|-----|-----|-------------|
|-------------|-----|-----|-------------|

| | | | |
|------------|----|----|------------|
| +3.3VD | 1 | 2 | GND |
| I2C1_SCL | 3 | 4 | I2C1_SDA |
| CSI0_VS | 5 | 6 | CSI0_HS |
| CSI0_PCLK | 7 | 8 | NC |
| CSI0_DAT19 | 9 | 10 | CSI0_DAT18 |
| CSI0_DAT17 | 11 | 12 | CSI0_DAT16 |
| CSI0_DAT15 | 13 | 14 | CSI0_DAT14 |
| CSI0_DAT13 | 15 | 16 | CSI0_DAT12 |
| GND | 17 | 18 | CSI0_DAT11 |
| CSI0_PWDN | 19 | 20 | CSI0_DAT10 |

J24: VGA

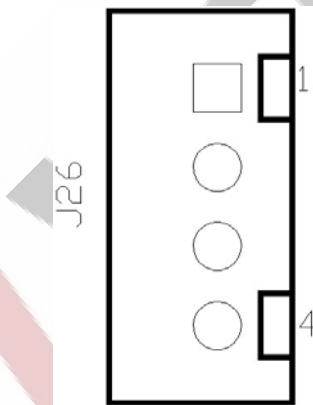
| Signal Name | PIN | PIN | Signal Name |
|-------------|-----|-----|-------------|
| NC | 1 | 2 | VGA_HS |
| NC | 3 | 4 | VGA_VS |
| GND | 5 | 6 | BULE |
| GND | 7 | 8 | GREEN |
| GND | 9 | 10 | RED |

J25: MIC



picture 8

| PIN | Signal Name |
|-----|-------------|
| 1 | MIC_INP |
| 2 | MIC_INM |



picture 9

J26: Audio PIN interface

| PIN | Signal Name |
|-----|-------------|
| 1 | LSPK1 |
| 2 | LSPK2 |
| 3 | RSPK1 |
| 4 | RSPK2 |

J27: Standard SATA hard disk interface

| PIN | Signal Name |
|-----|-------------|
| 1 | GND |
| 2 | SATA_TXP |
| 3 | SATA_TXM |
| 4 | GND |
| 5 | SATA_RXM |
| 6 | SATA_RXP |
| 7 | GND |

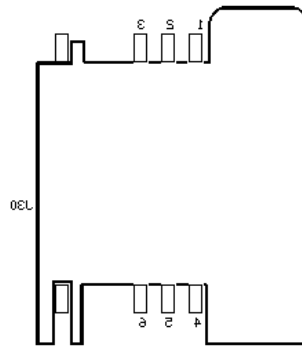
J28:SATA hard disk power supply interface, 2.54 PIN with frame

| PIN | Signal Name |
|-----|-------------|
| 1 | +5.0VD |
| 2 | GND |
| 3 | GND |
| 4 | +12.0VD |

J29: MINI_PCIE

| Signal Name | PIN | PIN | Signal Name |
|-------------|-----|-----|-------------|
| Reserved | 1 | 2 | PCIE_3V3 |
| Reserved | 3 | 4 | GND |
| Reserved | 5 | 6 | PCIE_1V5 |
| Reserved | 7 | 8 | UIM_PWR |
| GND | 9 | 10 | UIM_DATA |
| CLK1_N | 11 | 12 | UIM_CLK |

| | | | |
|----------|----|----|------------|
| CLK1_P | 13 | 14 | UIM_RST |
| GND | 15 | 16 | UIM_VPP |
| Reserved | 17 | 18 | GND |
| Reserved | 19 | 20 | PCIE_DISEN |
| GND | 21 | 22 | PCIE_RSTN |
| PCIE_RXM | 23 | 24 | PCIE_3V3 |
| PCIE_RXP | 25 | 26 | GND |
| GND | 27 | 28 | PCIE_1V5 |
| GND | 29 | 30 | I2C2_SCL |
| PCIE_TXM | 31 | 32 | I2C2_SDA |
| PCIE_TXP | 33 | 34 | GND |
| GND | 35 | 36 | USBDN_DM3 |
| Reserved | 37 | 38 | USBDN_DP3 |
| Reserved | 39 | 40 | GND |
| Reserved | 41 | 42 | LED_WWAN |
| Reserved | 43 | 44 | LED_WLAN |
| Reserved | 45 | 46 | LED_WPAN |
| Reserved | 47 | 48 | PCIE_1V5 |
| Reserved | 49 | 50 | GND |
| Reserved | 51 | 52 | PCIE_3V3 |



picture 10

J30: SIM Card

| Signal Name | PIN | PIN | Signal Name |
|-------------|-----|-----|-------------|
| UIM_PWR | 1 | 4 | GND |
| UIM_RST | 2 | 5 | UIM_VPP |
| UIM_CLK | 3 | 6 | UIM_DATA |

J31: 2*4GPIO interface 2-ch, 5-wire UART multiplex with 2-ch RS485

| Signal Name | PIN | PIN | Signal Name |
|------------------|-----|-----|------------------|
| GPIO2_16 | 1 | 2 | GPIO2-20 |
| GPIO2-17 | 3 | 4 | GPIO2-21 |
| GPIO2-18 | 5 | 6 | GPIO2-22 |
| GPIO2-19 | 7 | 8 | GPIO2-23 |
| GND | 9 | 10 | GND |
| J_RXD2(RS485-B2) | 11 | 12 | J_RXD3(RS485-B3) |
| J_TXD2(RS485-A2) | 13 | 14 | J_TXD3(RS485-A3) |
| GND | 15 | 16 | GND |
| J_CTS2 | 17 | 18 | J_CTS3 |
| J_RTS2 | 19 | 20 | J_RTS3 |

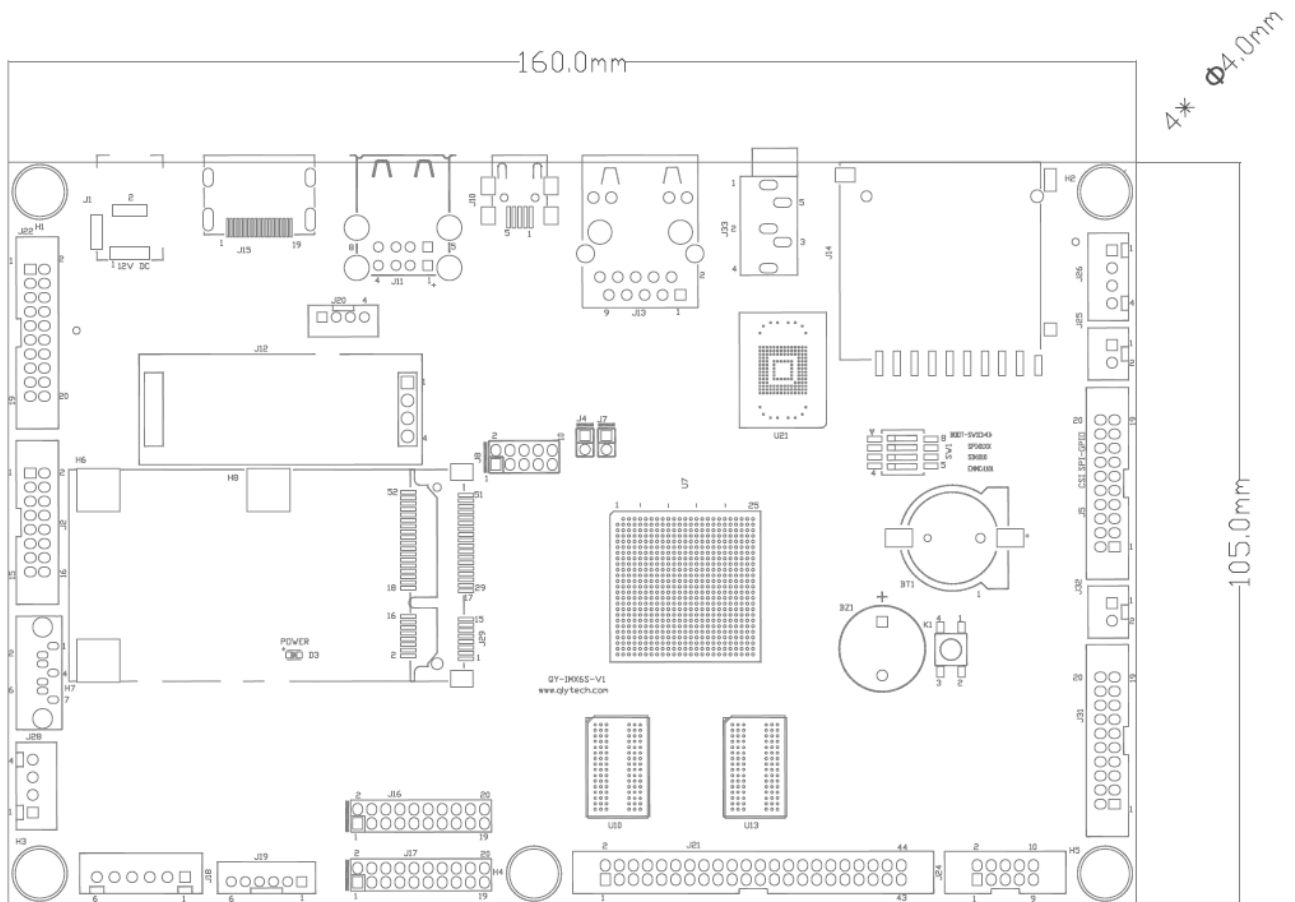
J32:+5.0VD Power supply output, can supply to peripherals

| PIN | Signal Name |
|-----|-------------|
| 1 | +5.0VD |
| 2 | GND |

J33:Audio output interface, PJ245 vertical 3.5mm board plug earphone socket

| PIN | Signal Name |
|-----|-------------|
| 1 | GND |
| 2 | NC |
| 3 | RSPK1 |
| 4 | NC |
| 5 | LSPK1 |

IV. Size & Structure Chart



picture 11

V. Remark

1. Before connect to LCD, confirm LCD power specification.
2. Please use the original connecting accessories, avoid damaging the main board.

3. We ensure offering communication technology support through E-mail, telephone for lifelong technical support service.

4. We ensure offering 6 months repair service for free, if malfunction occurs in warranty because of quality problem, contact our retailer or our company with purchase receipt in warranty period, we will repair or replace it.

5. Under these circumstances, we do not offer repair for free:

- Over warranty time;
- Do not have purchase receipt;
- Liquid inlet, Damp or Mold;
- Malfunction and damage is not due to product quality but drops, intense shaking, arbitrarily modify, disoperation after purchase;
- Damage of force majeure.

6. We reserve intellectual property for the software and hardware technical data of QY-IMX6S; users can only use them for teaching, testing, researching. Shall not be engaged in any commercial purpose. Shall not distribute them on the Internet. Shall not intercept, modify them to tamper copyright.

7. We accept batch order; we can offer technical support and service.

Hangzhou Qiyang Intelligent Technology Co., Ltd

Tel: 86-571-87858811 / 87858822

Fax: 86-571-89935912

Technology Support: 86-571-89935913

E-MAIL: supports@qiyangtech.com

Website: <http://www.qiytech.com>

Address: 5F, Building 3A, NO.8 Xiyuanyi Road, West Lake Science
Park, Hangzhou, China

Post Code: 310030

