

G2E Development Kit

Renesas Electronics
www.renesas.com

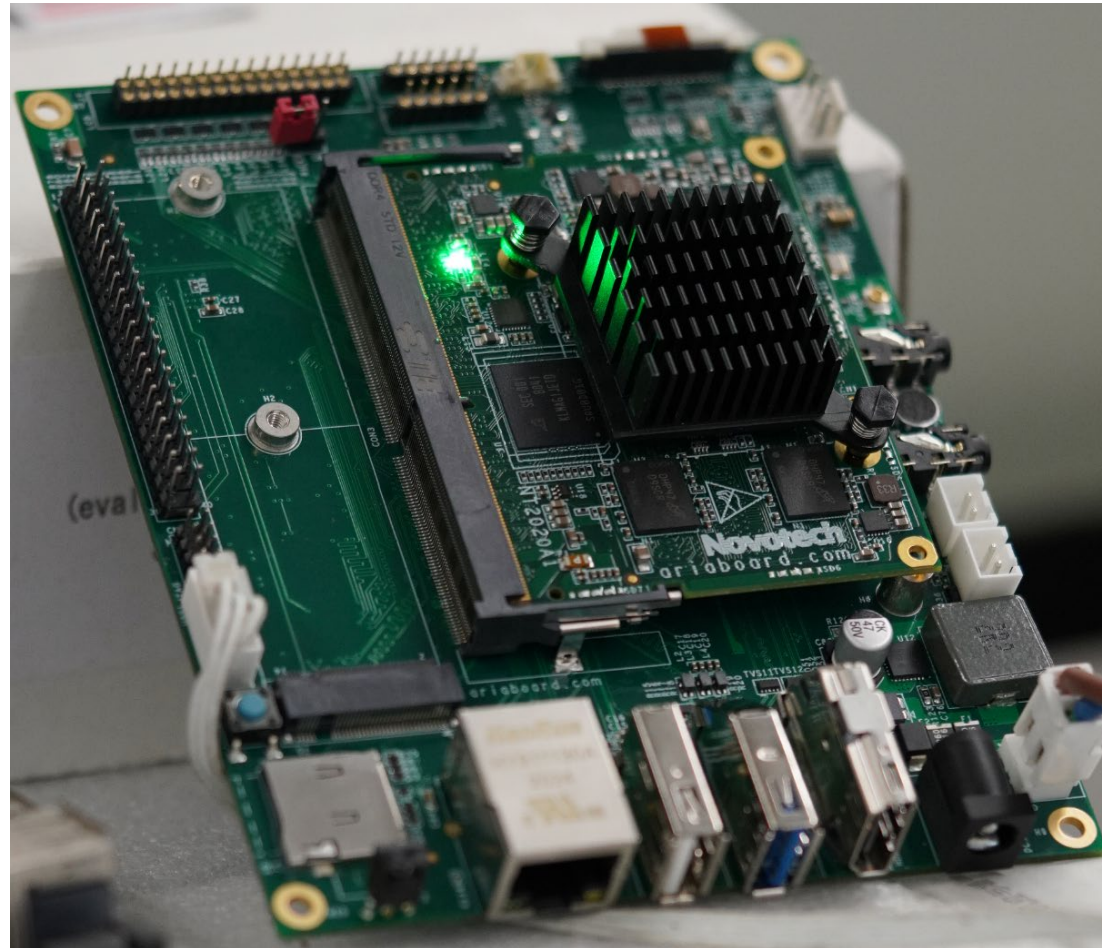
Ariaboard

Designed by Shanghai Novotech

https://ariaboard.com/products/renesas_g2e.html



The g2e development kit consists of two motherboards,
a **core board** and an **EVB board**(evaluation board).



G2E Core Board

Renesas Electronics
www.renesas.com

RZG2E_NT2020A1

Ariaboard

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https://ariaboard.com/products/renesas_g2e.html



G2E Core Board

Part Number: RZG2E_NT2020A1

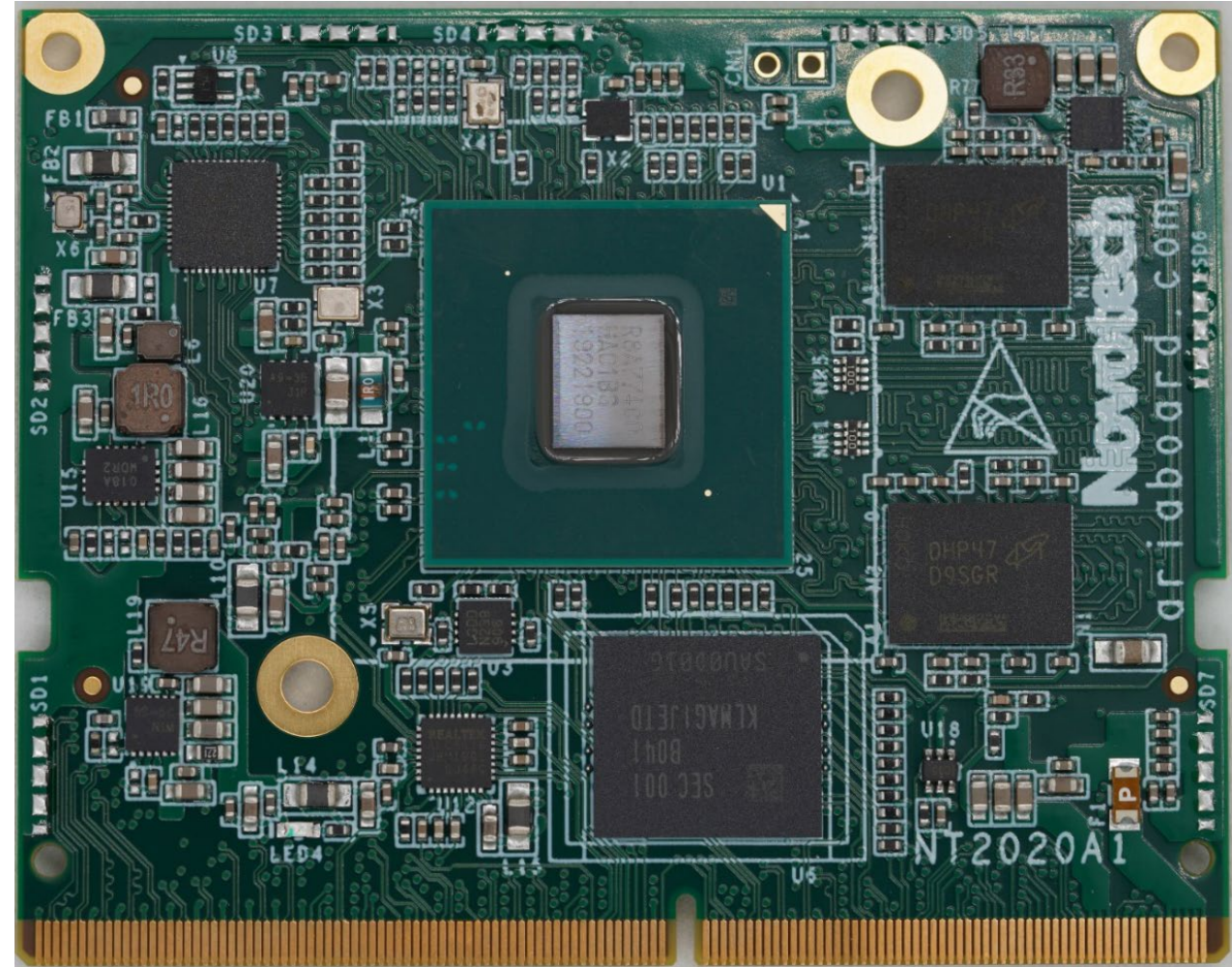


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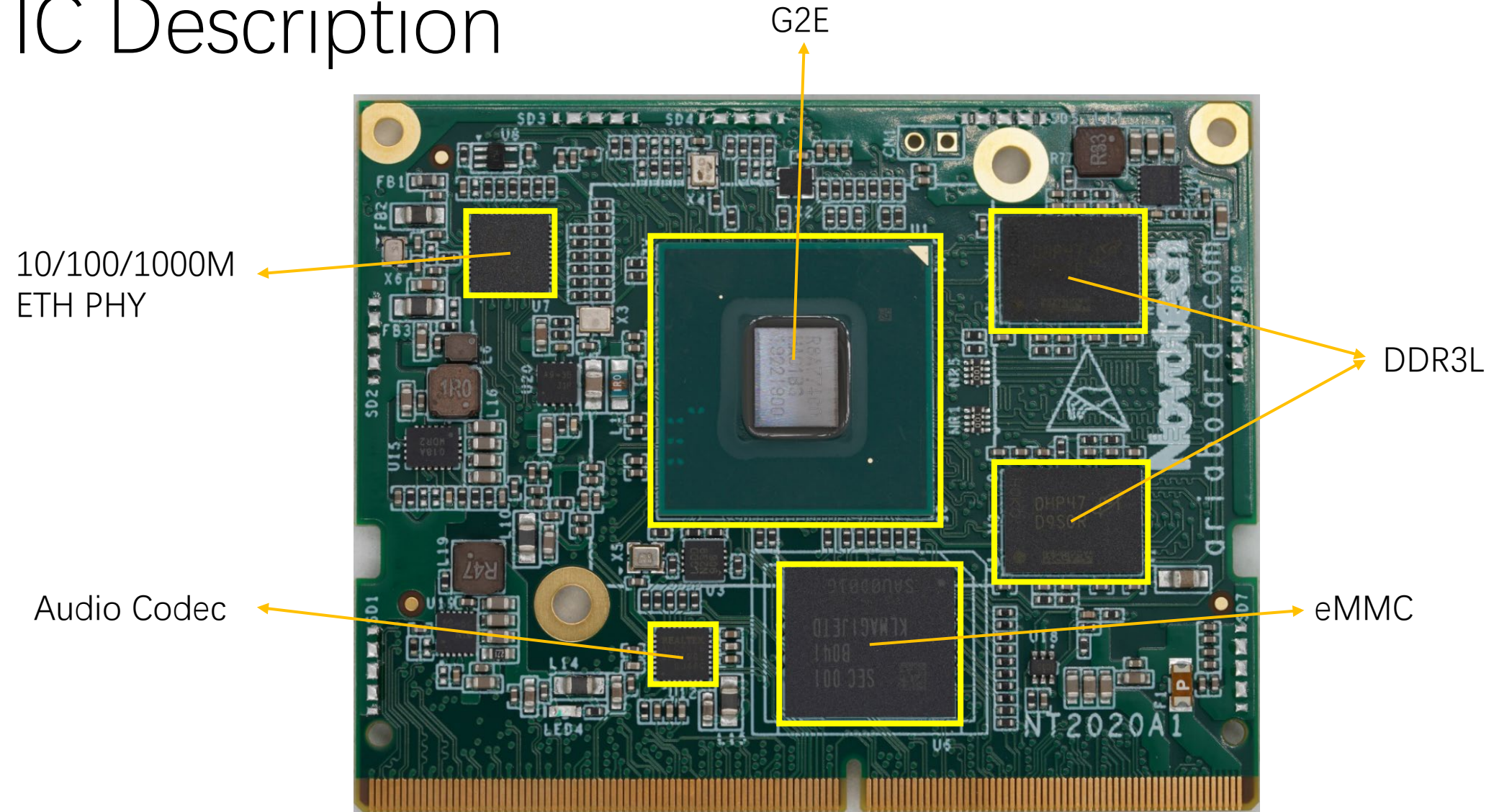
- Module Size: 60mm x 70mm x 20mm (with Heat sink) ;
60mm x 70mm x 5.2mm (without Heat sink) ;
- G2E core Board use DDR4 SODIMM 260P STD Connector;
- Reserved cooling fan ;
- Reserved shielding frame ;

Hardware Spec

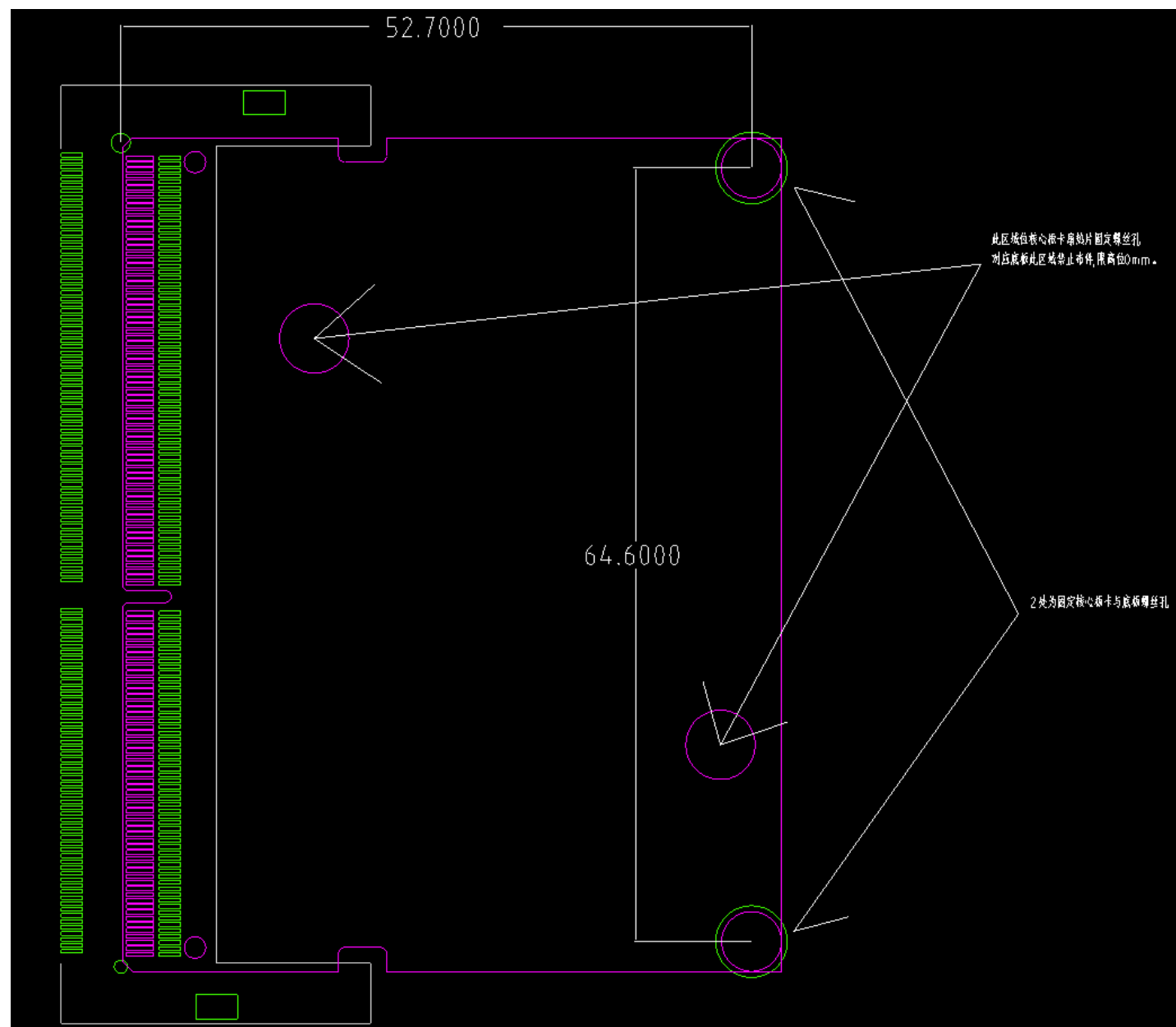
- CPU: Renesas RZ/G2E Dual Cortex®-A53 1.2GHz;
- DDR: 32bit DDR3L-1866 2GByte (up to 4GByte) ;
- Flash: eMMC-5.1 16GByte
- Audio Codec: Realtek ALC5616 24bit/8kHz ~ 192kHz ADC/DAC;
- Ethernet: Realtek RTL8211E-VB-CG 10/100/1000M PHY
- Display: RGB888;
2 Channel LVDS;
- Camera: 2-line CSI;
- UART x5
- CAN BUS x2
- QSPI x1
- SPI x1
- I2C x4
- I2S x1
- USB2.0 x1
- USB3.0 x1
- PCIe x1
- SDIO x2
- Power: DC5V@2.5A



IC Description



Layout



IO CONN

- Socket CONN: TE Internal #: 2309409-4 (H=5.2mm)
TE Internal #: 2309411-1 (H=8mm)
TE Internal #: 2309413-4 (H=9.2mm)

IO Description



G2E EVB Board

Renesas Electronics
www.renesas.com

RZG2E_NT2012A1

Ariaboard

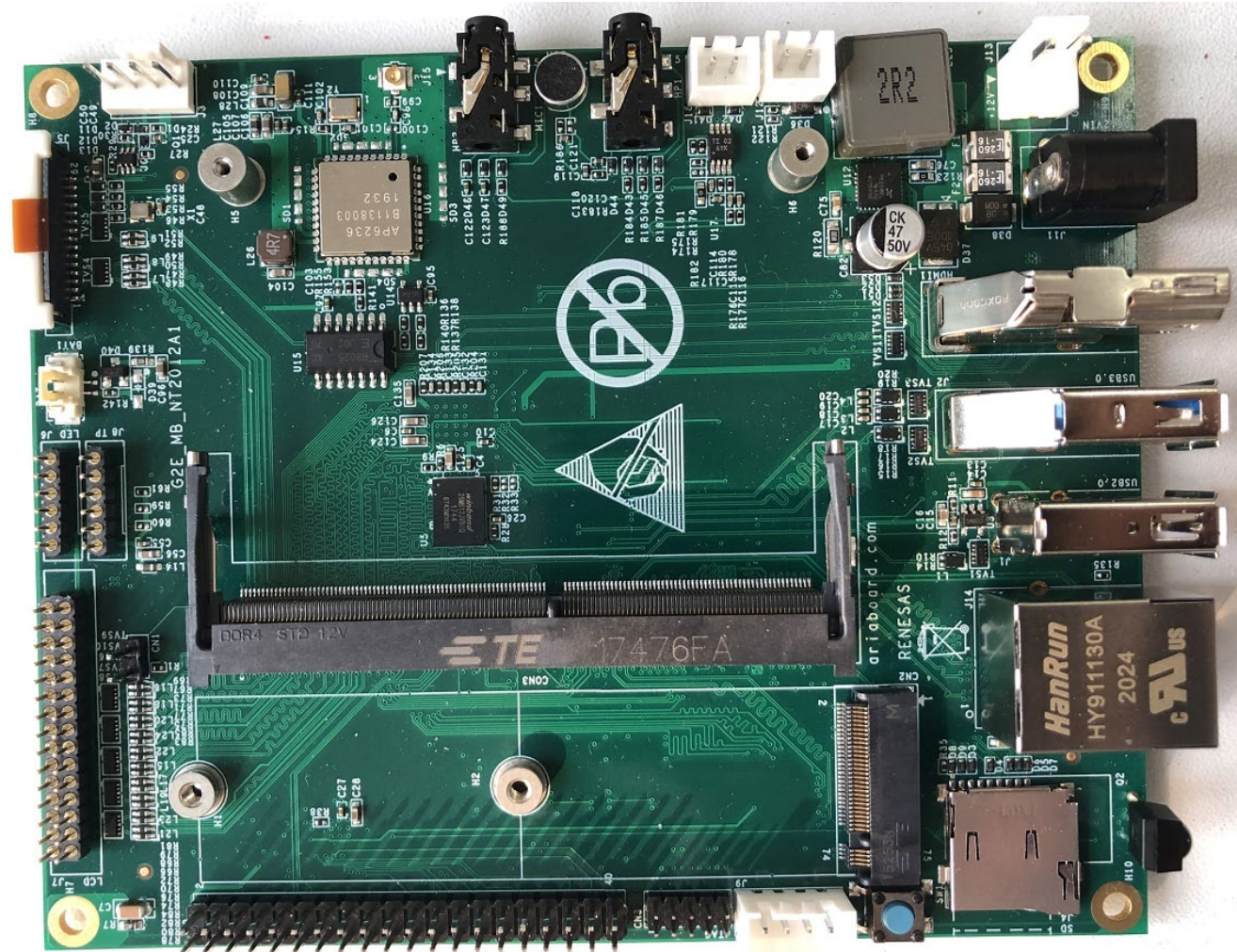
Designed by Shanghai Novotech

https://ariaboard.com/products/renesas_g2e.html



G2E EVB Board

Part Number: RZG2E_NT2012A1

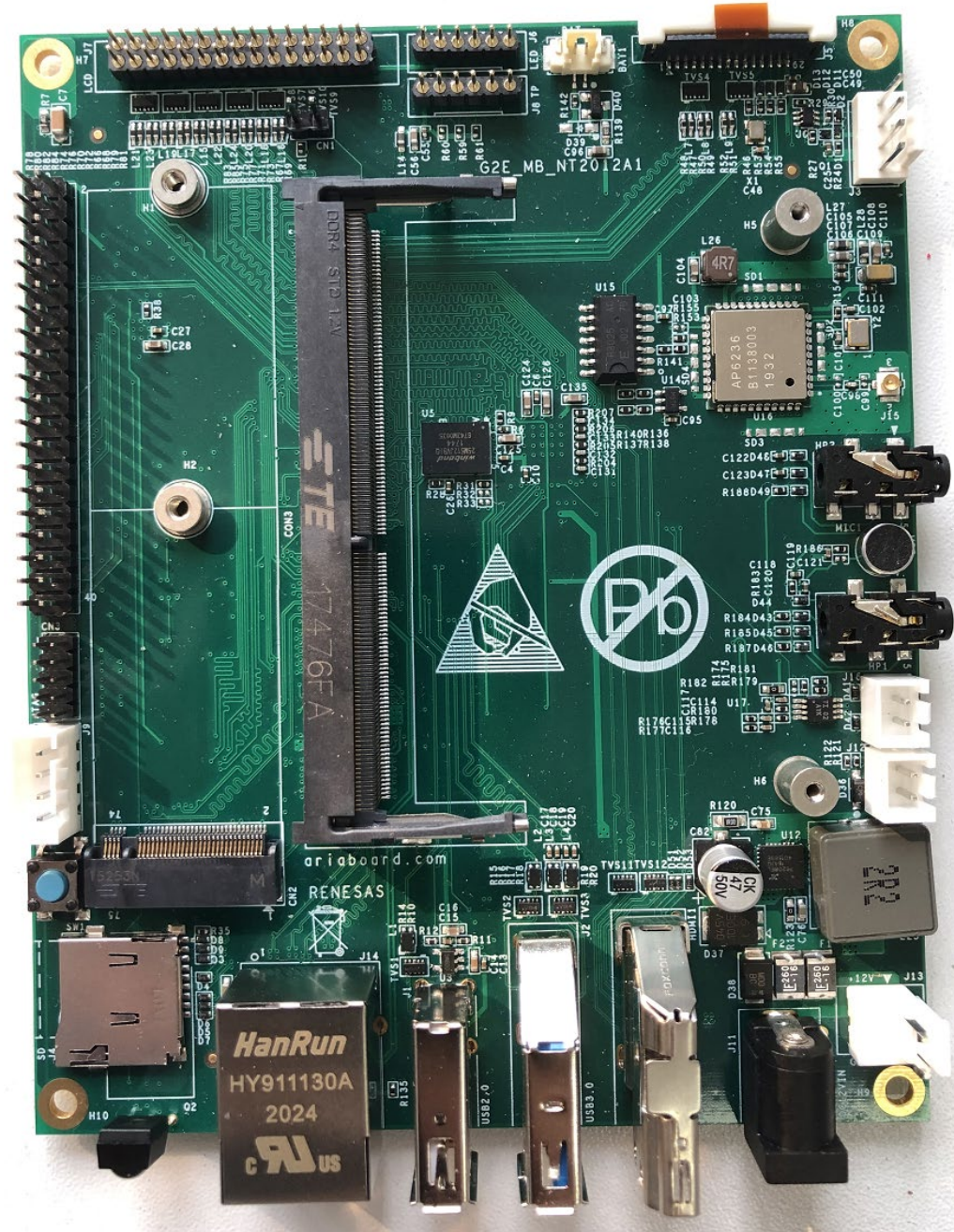


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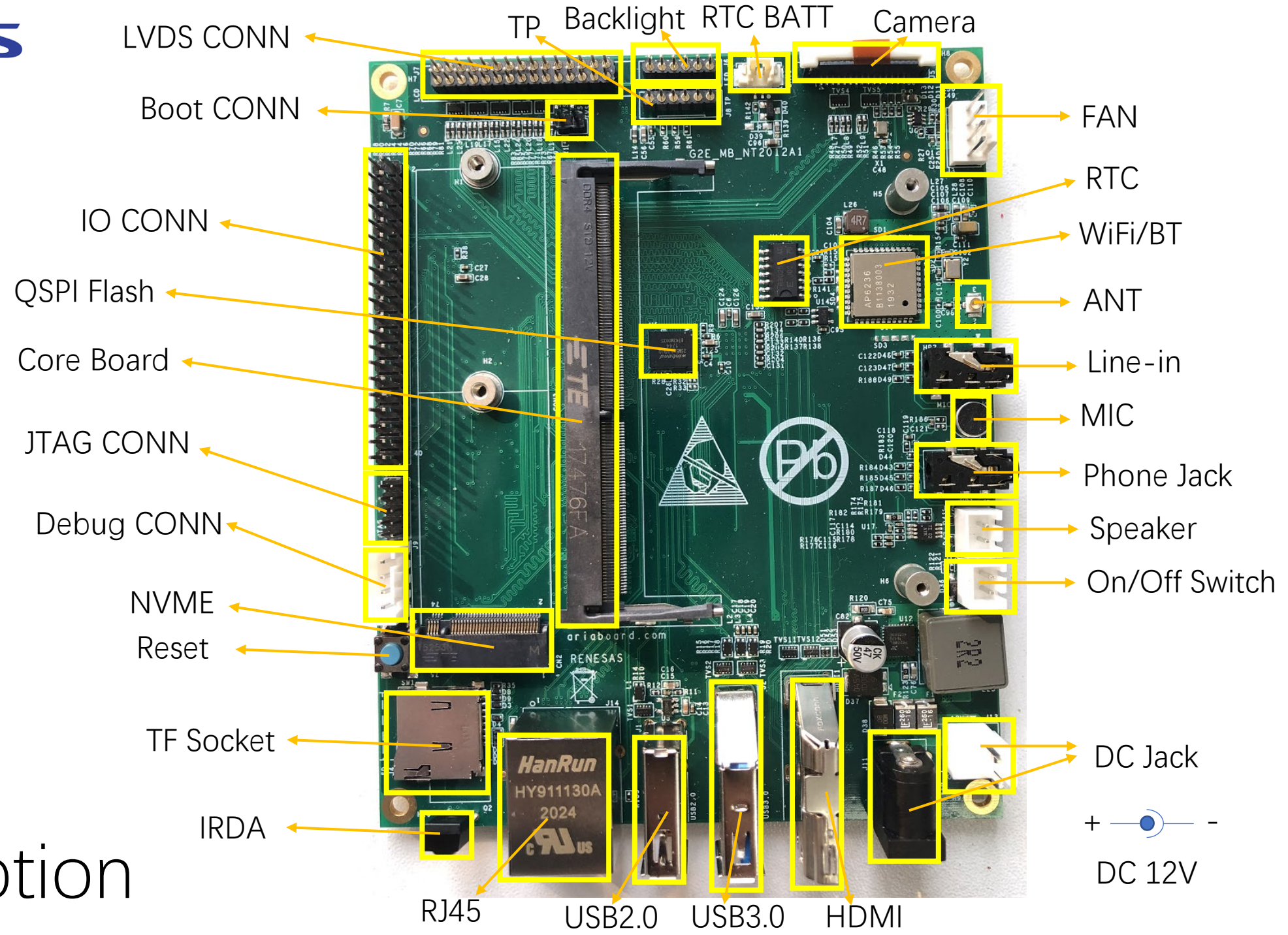
- EVB Size : 105mm x 130mm x 27mm (with Heat sink) ;
105mm x 130mm x 20mm (without Heat sink) ;

Hardware Spec

- RTC: RX-8025SA;
- QSPI Flash: W25M512JVBIQ;
- WiFi/BT Module: AP6236 (802.11b/g/n, BT4.2)
- Audio IO: Stereo Headphone x1;
Stereo Line-in x1;
Mic x1;
MONO Speaker CONN (2W/8ohm)
- Ethernet: RJ45 100/1000M
- LVDS CONN: 2 Channel LVDS;
- Backlight CONN: 12V/5V/PWM
- Touch Pannel CONN: 3.3V/I2C
- Camera CONN: 2-line CSI;
- HDMI x1
- CAN BUS x2
- RS485 x1
- IRDA x1
- USB2.0 x1
- USB3.0 x1
- Reset KEY
- Debug Port (UART TTL3.3V 115200)
- JTAG CONN x1
- PCIe x1 (NVME 2242/2280)
- TF Socket x1
- PWM FAN CONN x1
- DC JACK: DC12V@1.5A



IO Description

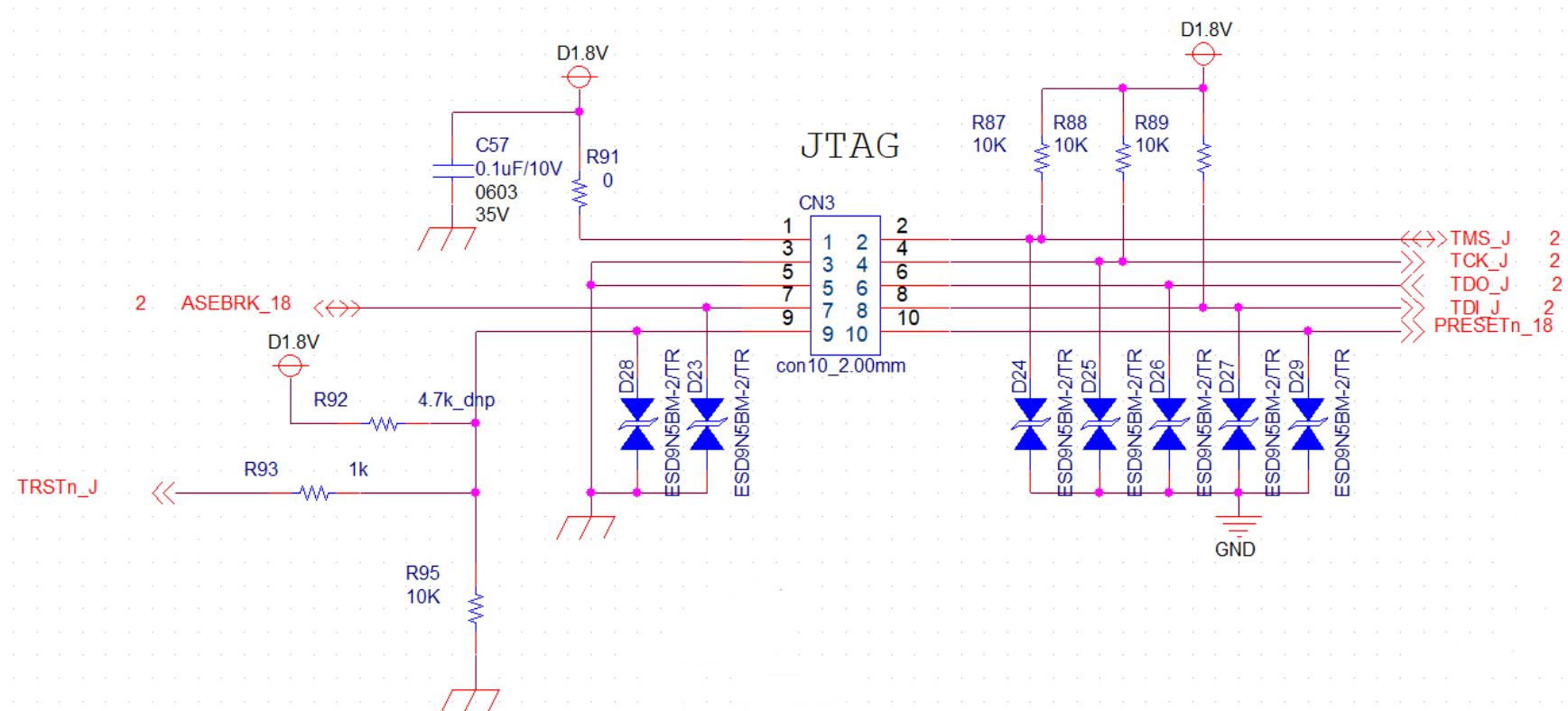


IO Description

- Boot CONN
 - (Short) : Boot from Debug UART for Download mode;
 - (Open) : Boot from eMMC for normal mode;

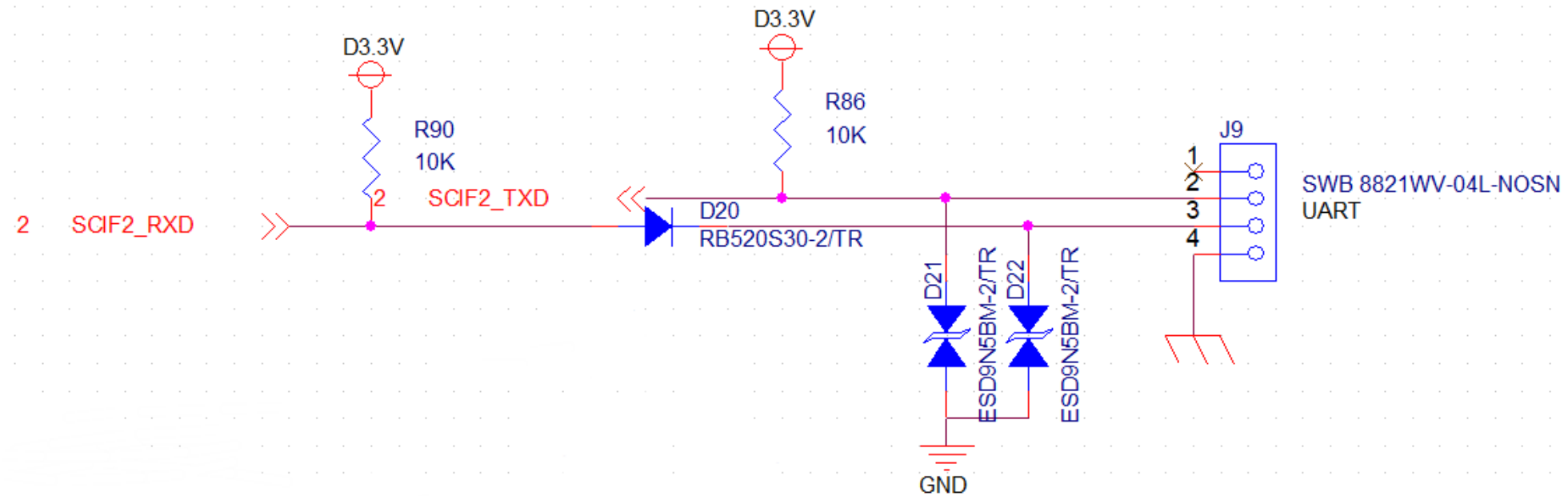
IO Description

- JTAG CONN



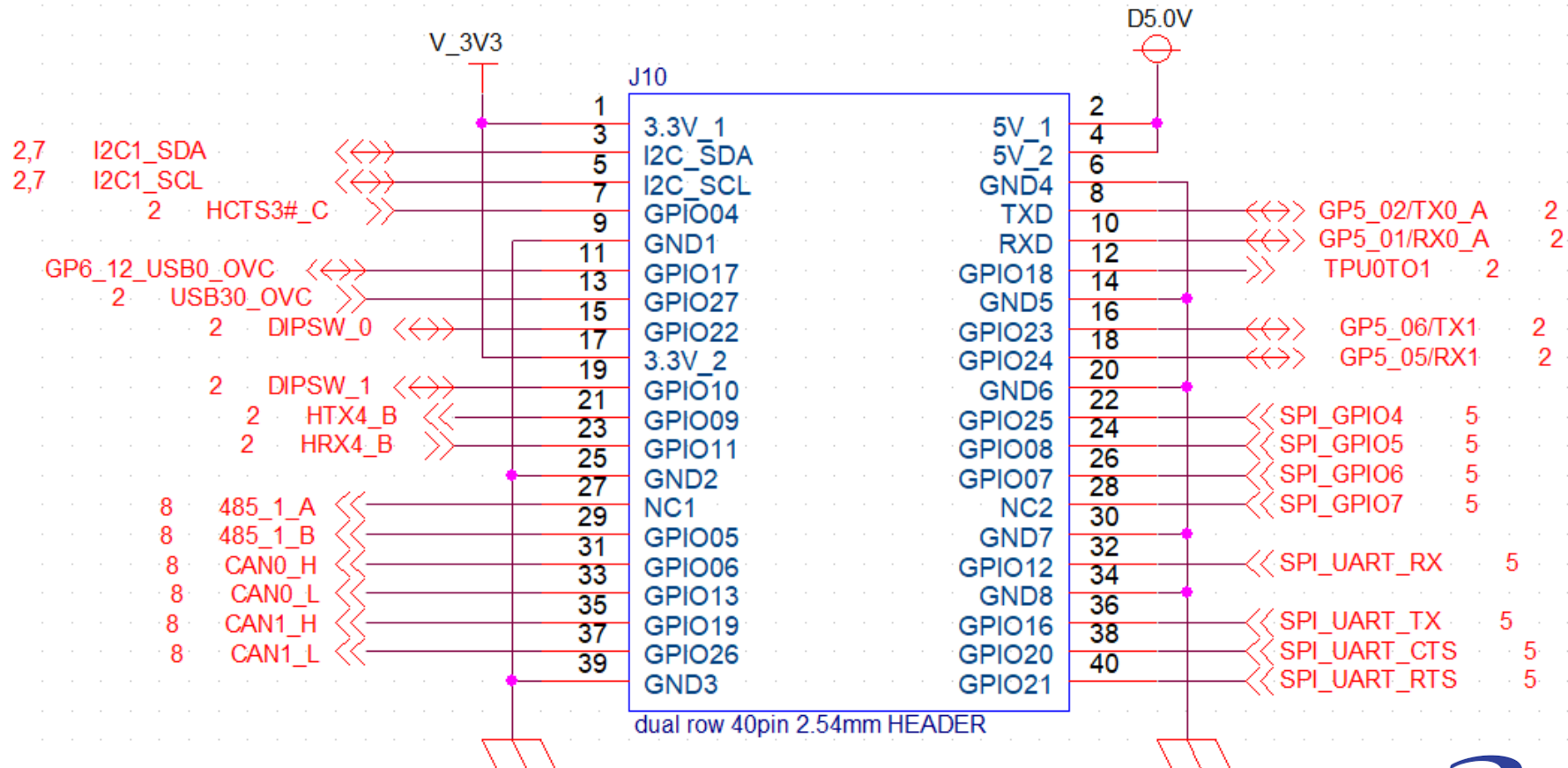
IO Description

- Debug CONN



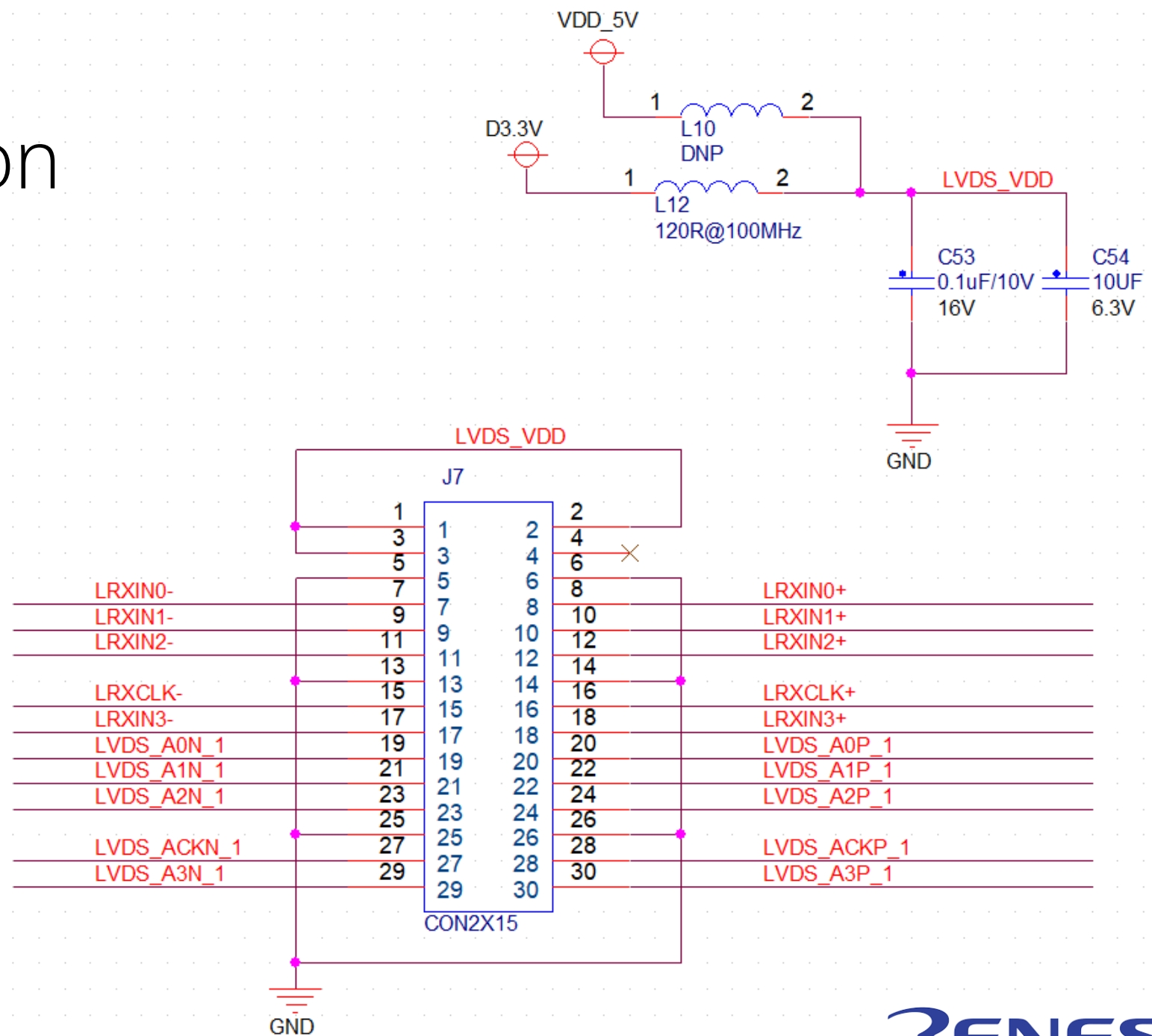
IO Description

- IO CONN



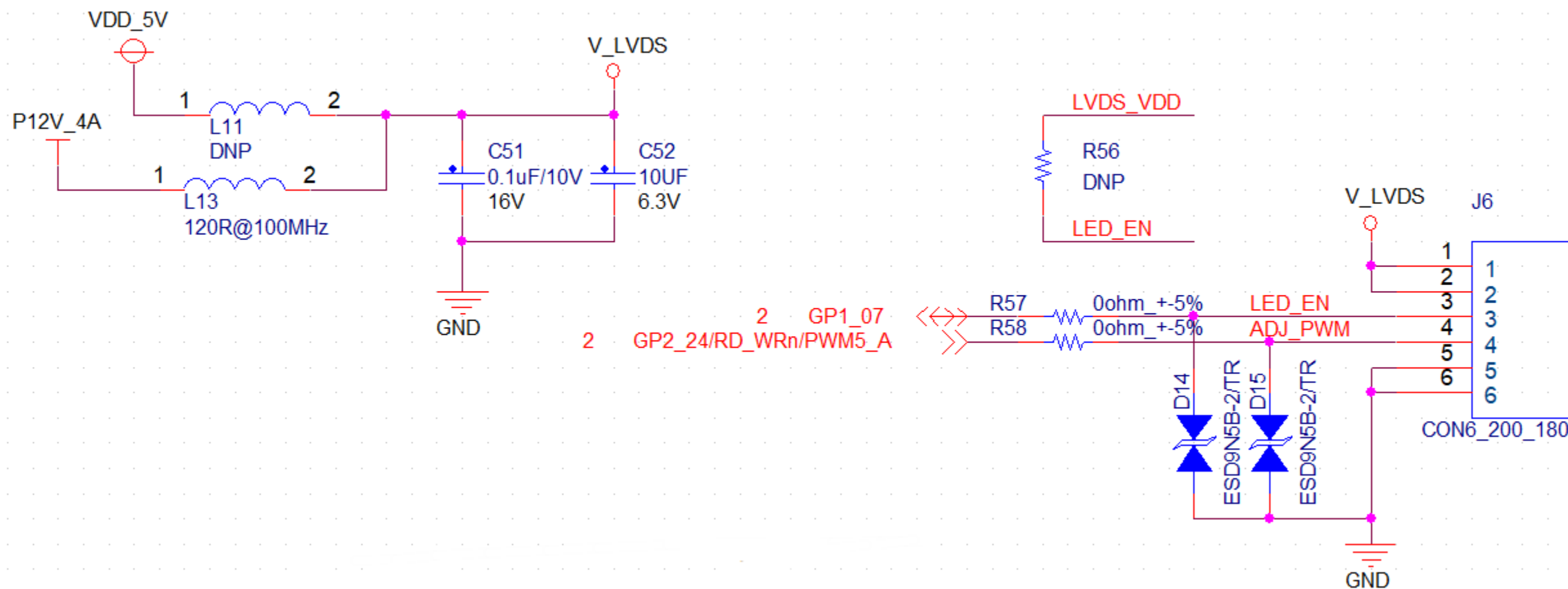
IO Description

- LVDS CONN



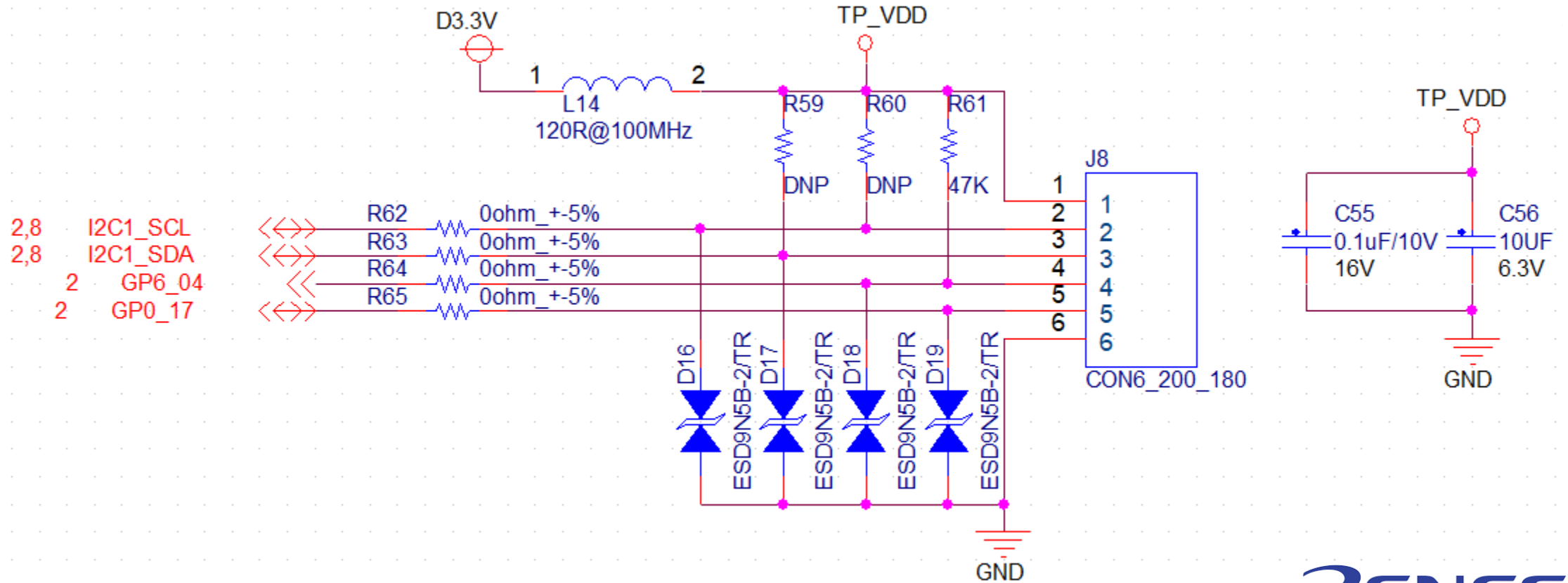
IO Description

- Backlight CONN



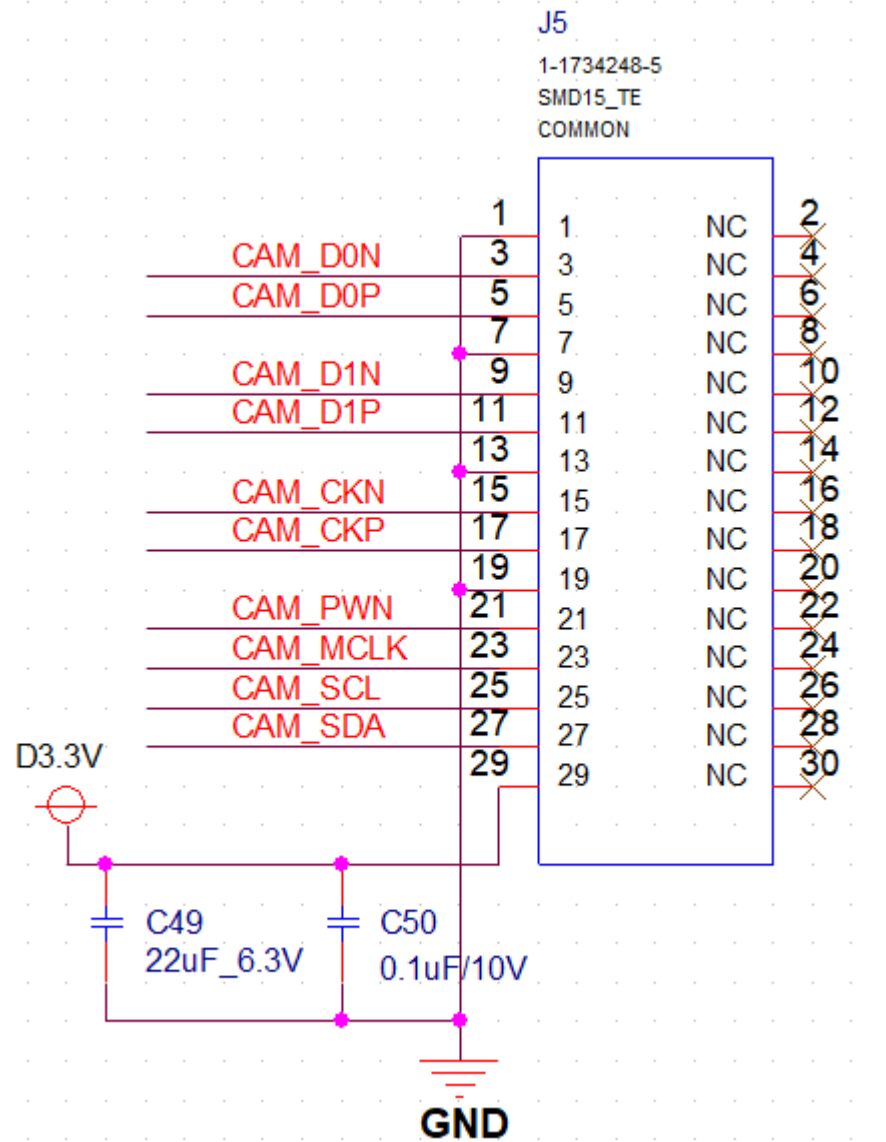
IO Description

- Touch-Pannel CONN



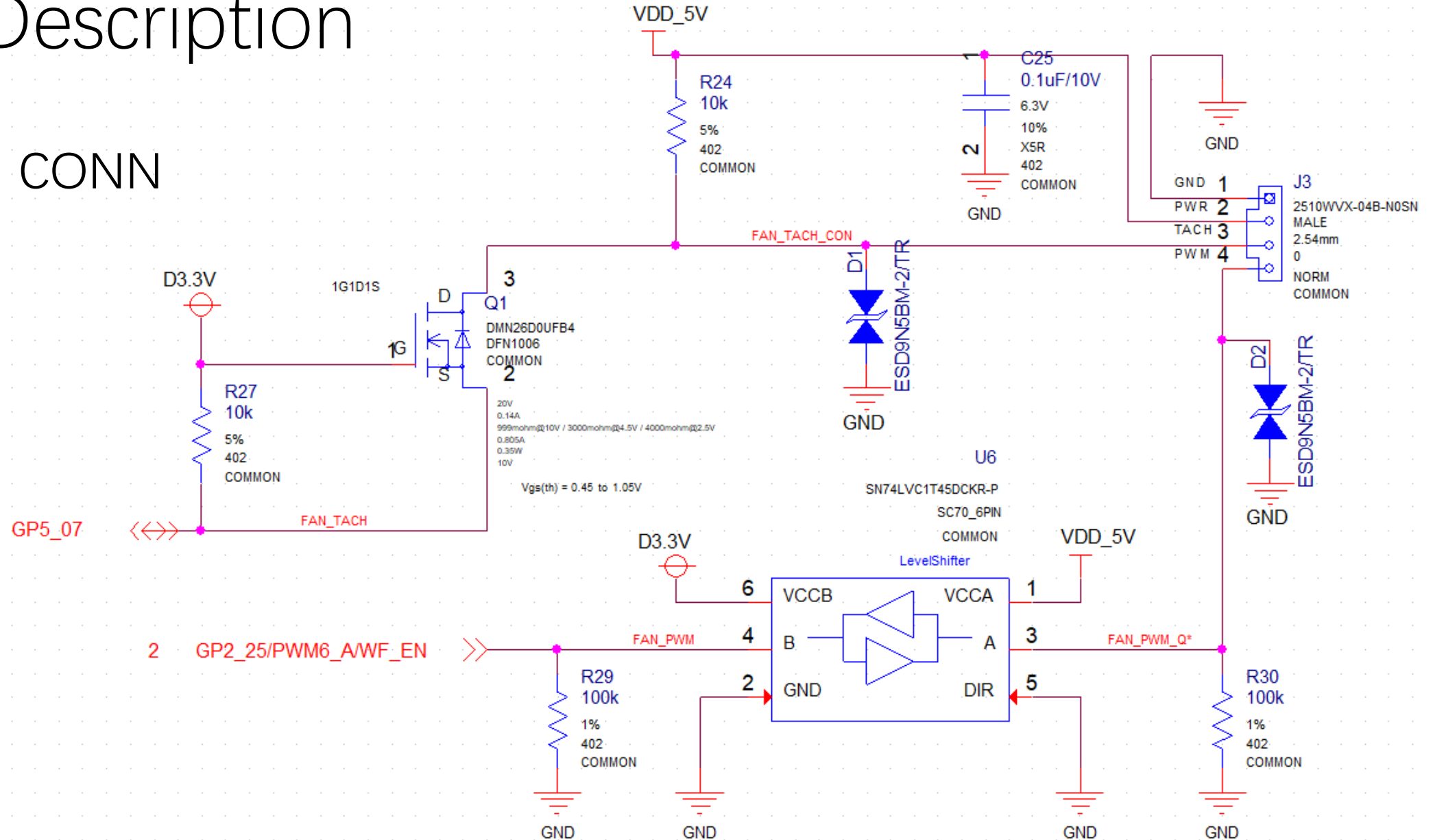
IO Description

- Camera CONN



IO Description

- FAN CONN

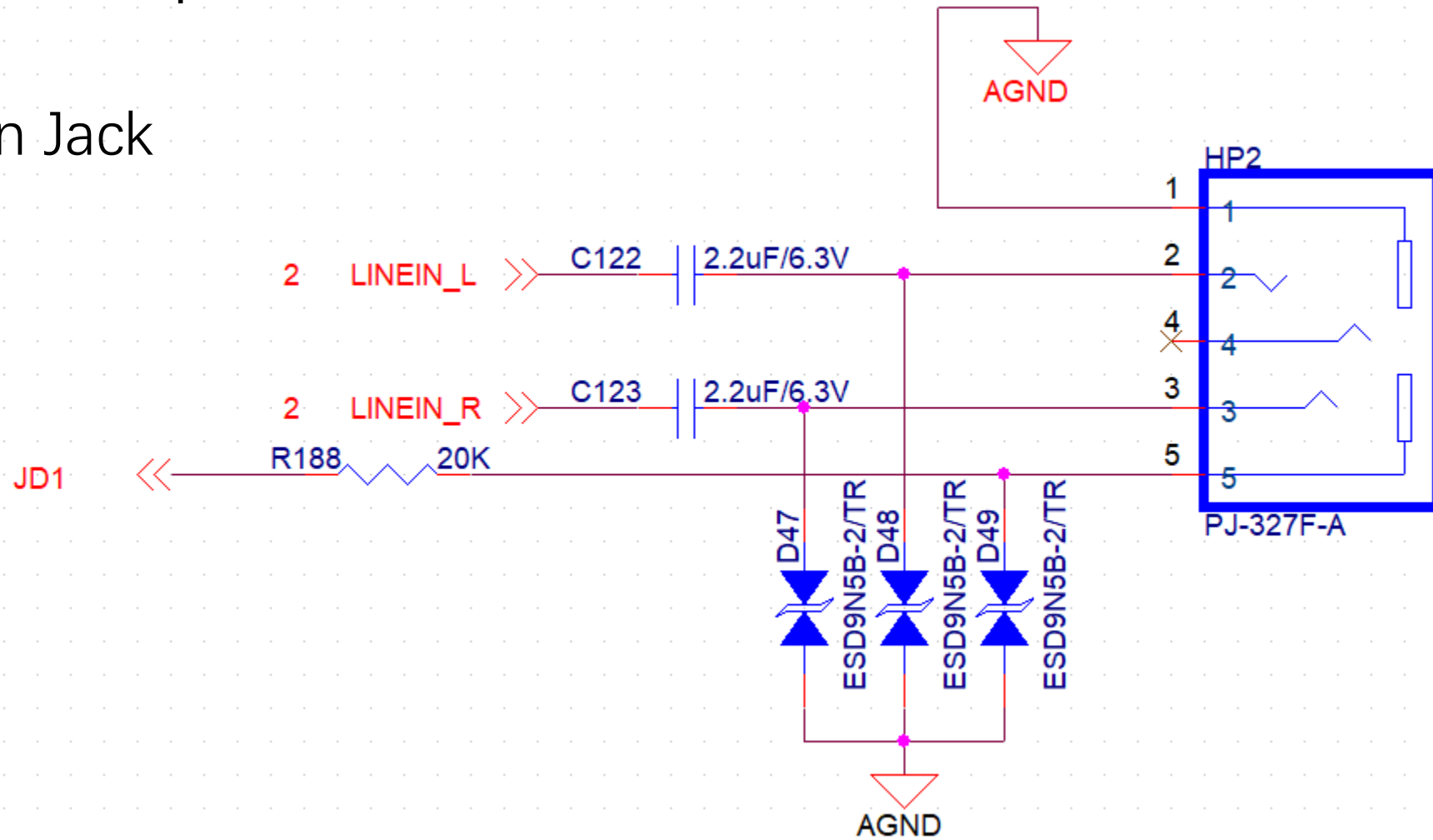


- Phone Jack



IO Description

- Line-in Jack



IO Description

- RTC BATT CONN
 - PIN1: BATT+
 - PIN2: GND
- Speaker CONN
 - PIN1: Speaker-
 - PIN2: Speaker+
- ON/OFF CONN
 - (Short) : Power OFF
 - (Open) : Power ON

Location

