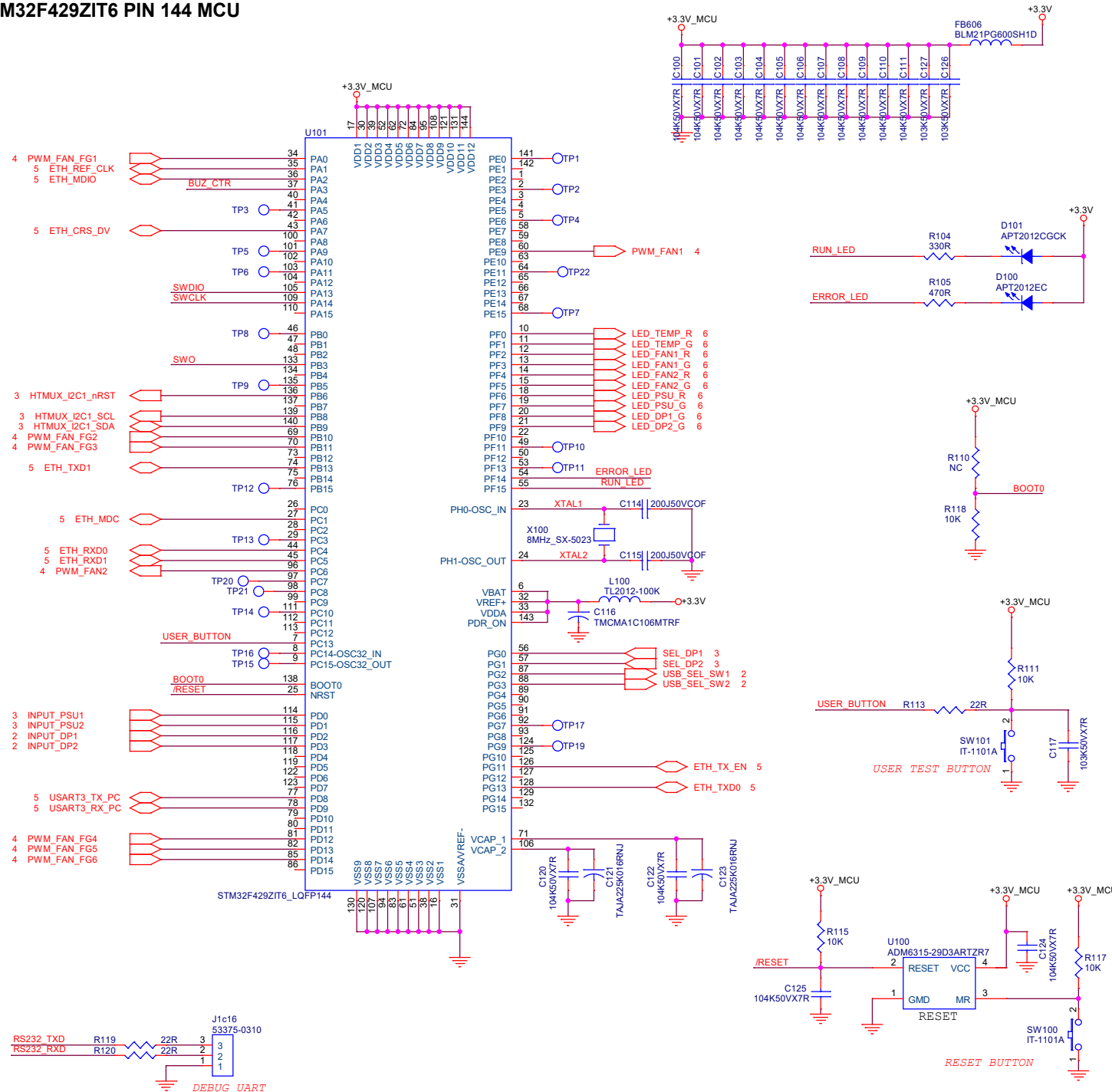
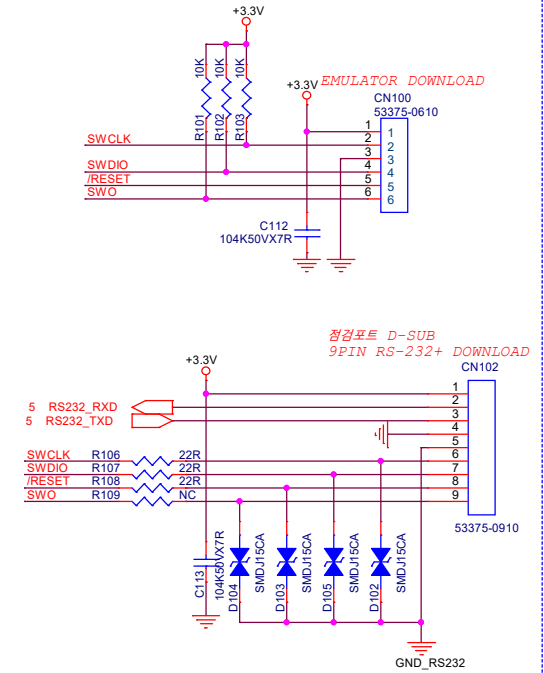


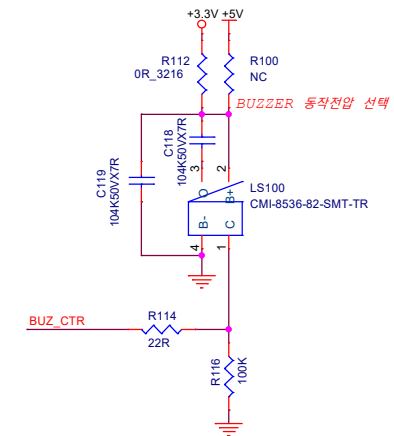
# STM32F429ZIT6 PIN 144 MCU



## DEBUG PORTS

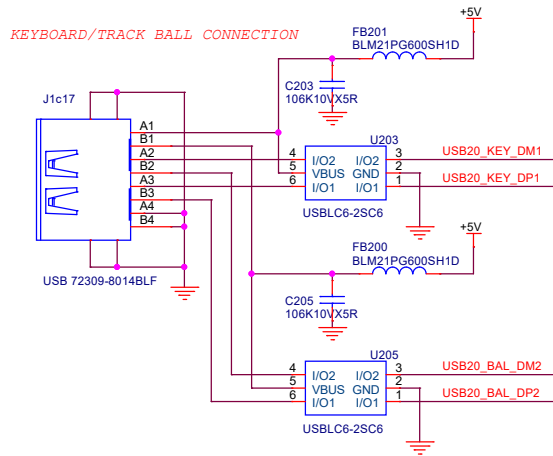


## BUZZER CONTROL

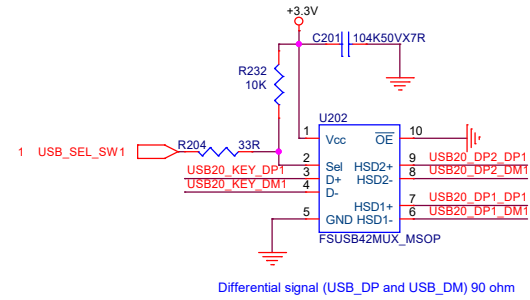


## KEYBOARD/TRACK BALL USB

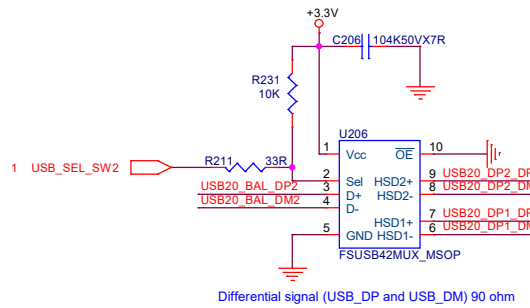
KEYBOARD/TRACK BALL CONNECTION



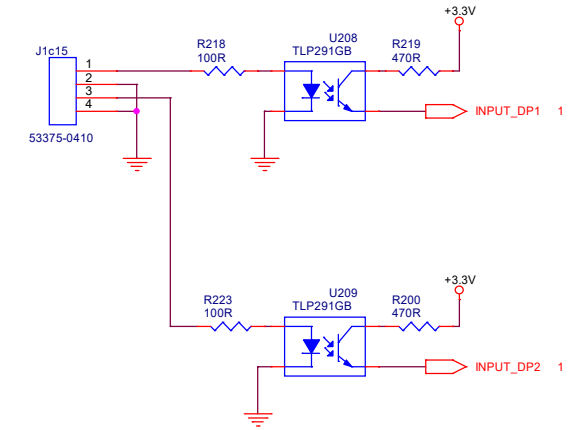
## KEYBOARD USB DEVICE / USB SWITCH



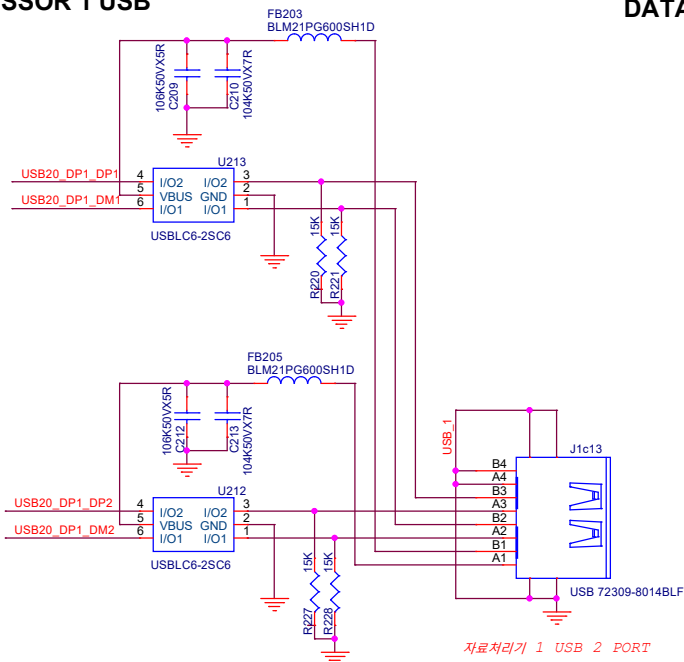
## Track Ball USB DEVICE / USB SWITCH



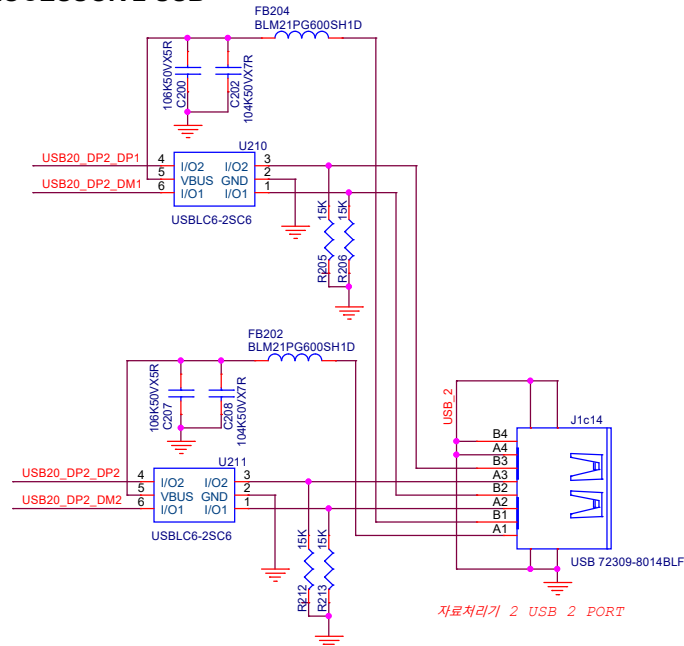
## DATA PROCESSOR 1/2 POWER LED INPUT



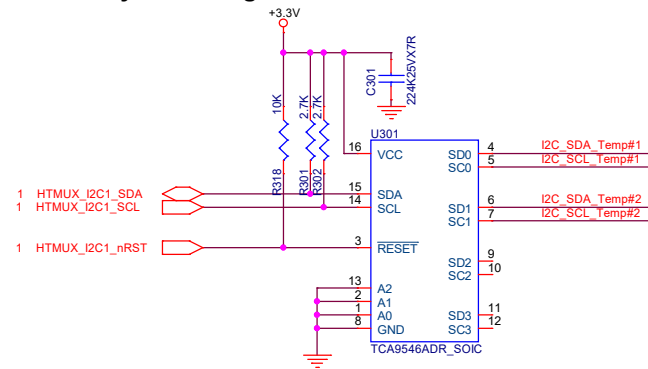
## DATA PROCESSOR 1 USB



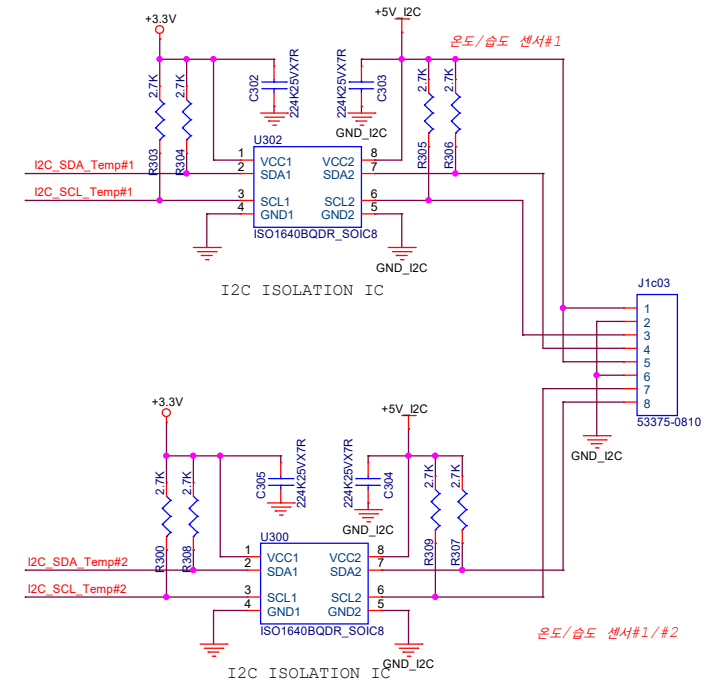
## DATA PROCESSOR 2 USB



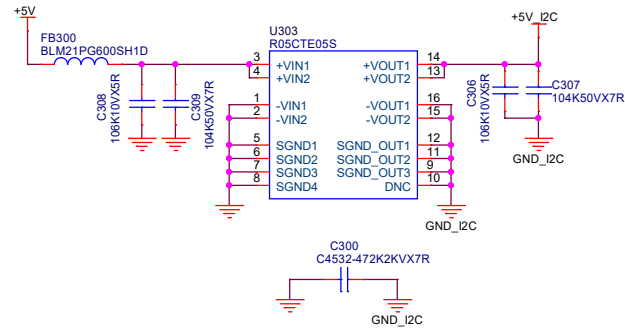
## I2C Temperature and humidity Switching



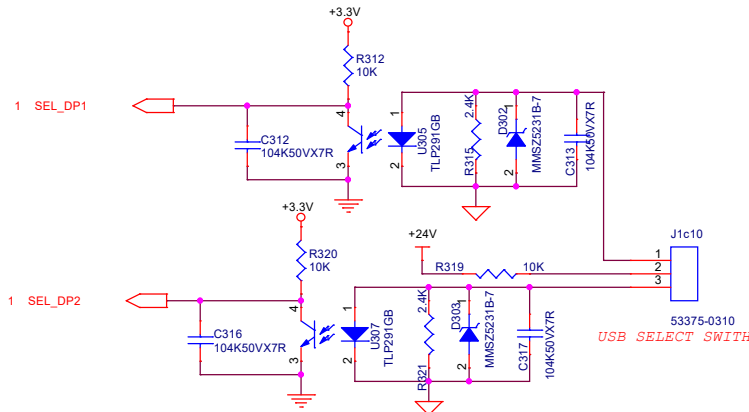
## I2C Temperature and humidity sensors Isolated



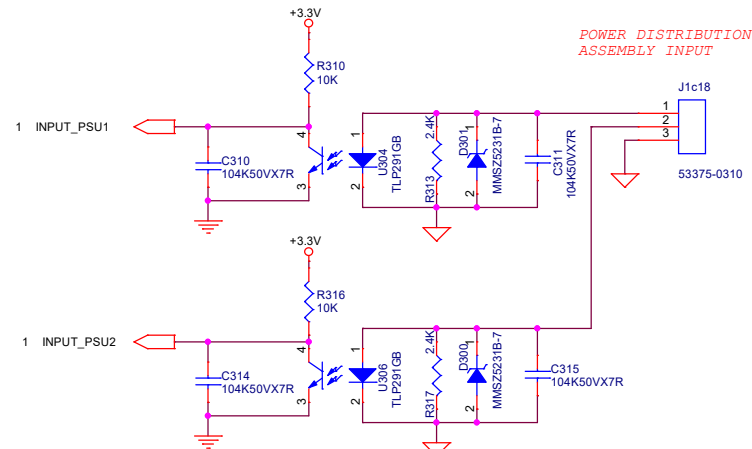
## I2C Temperature and humidity sensors Isolated DC-to-DC Converters



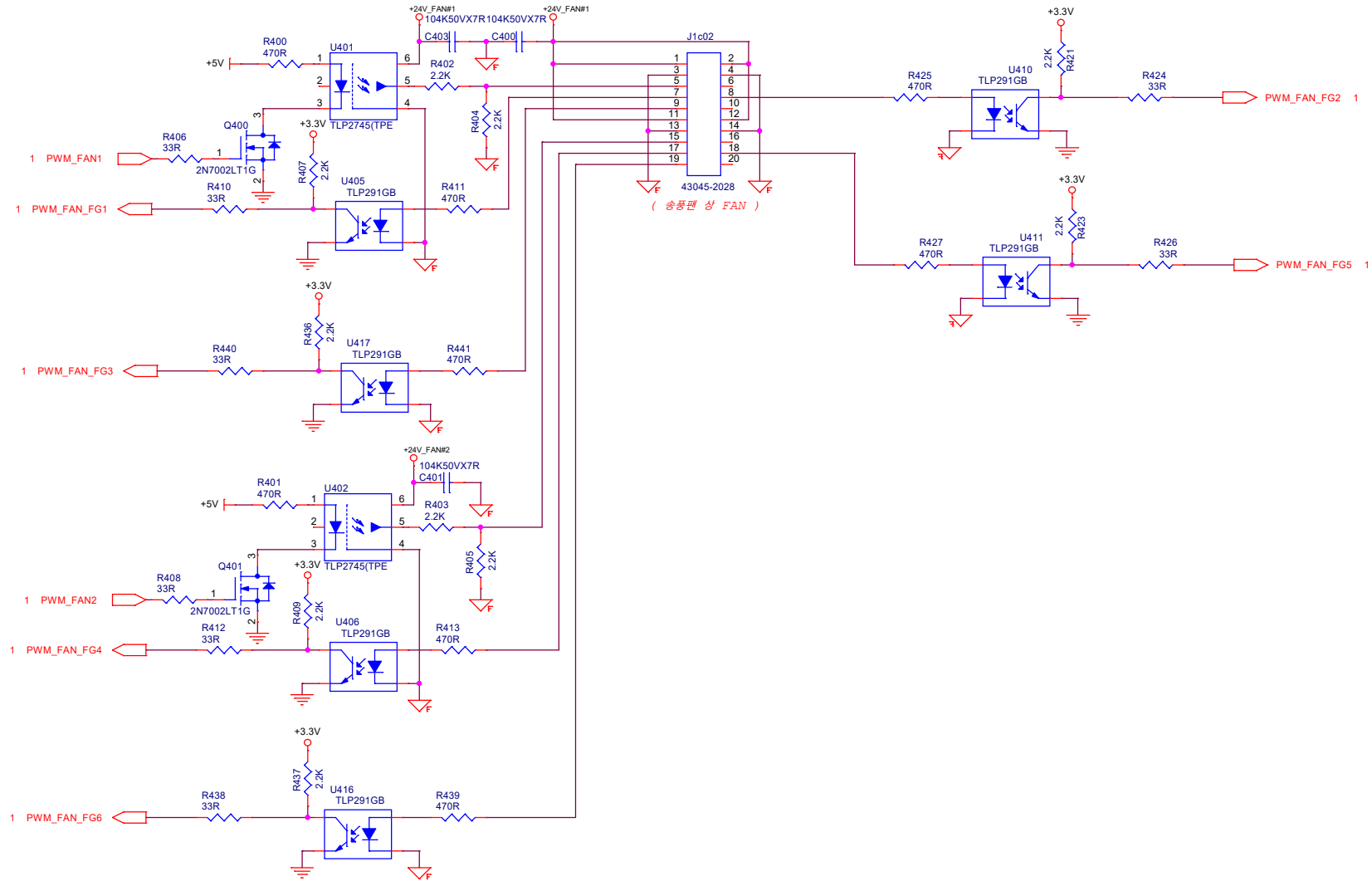
## DATA PROCESSOR 1, 2 SELECT SWITCH



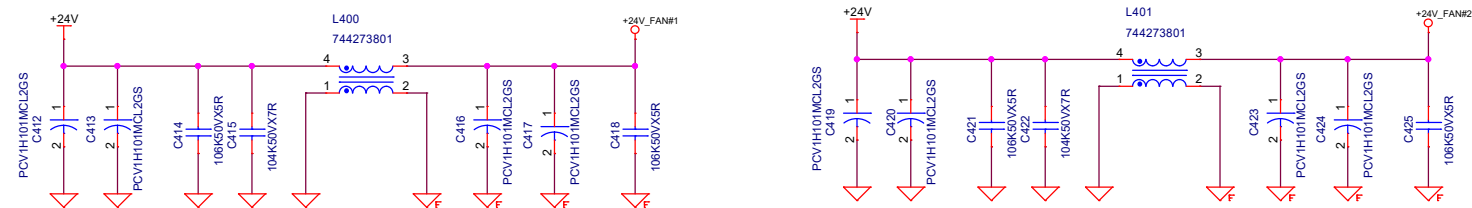
## POWER DISTRIBUTION ASSEMBLY INPUT



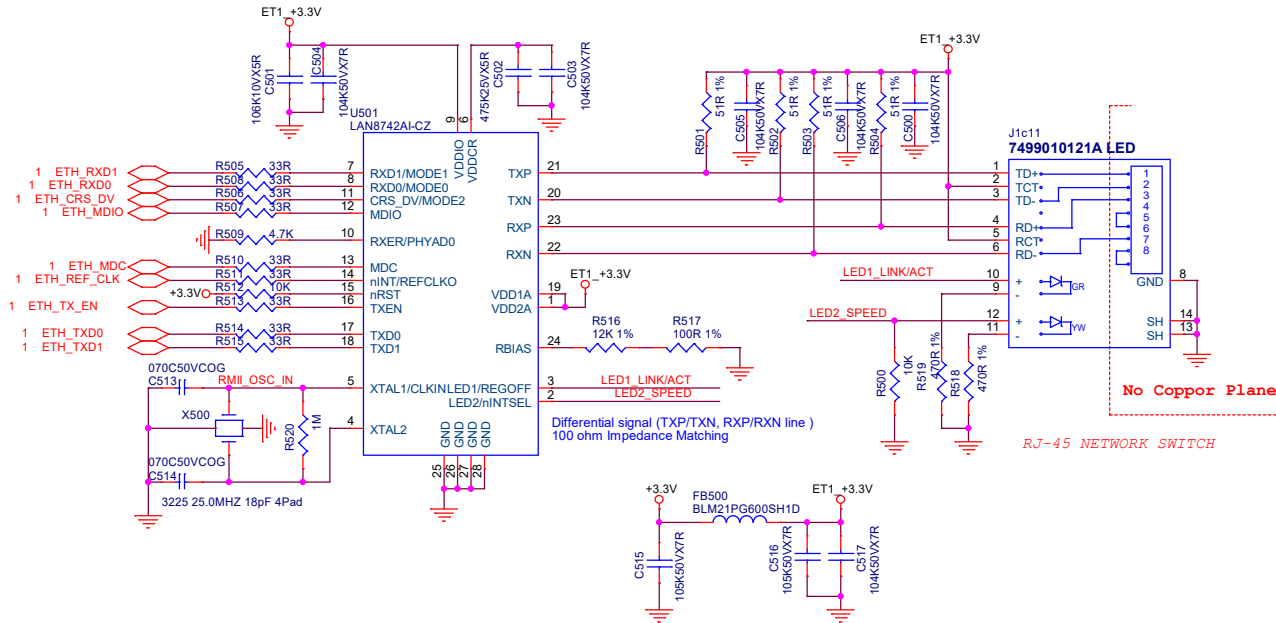
PWM & SENSE FAN CONTROL #1/#2



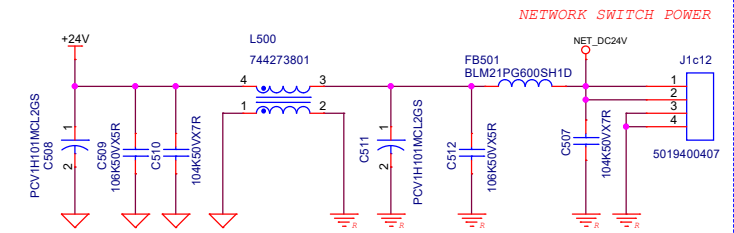
24V FAN MOTOR POWER



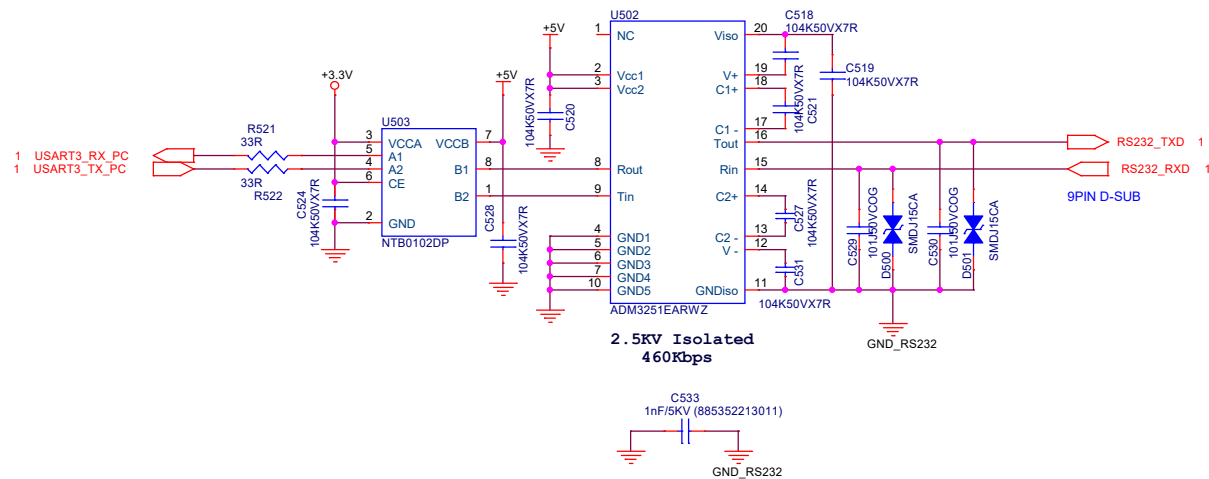
## RMII ETHERNET PHY



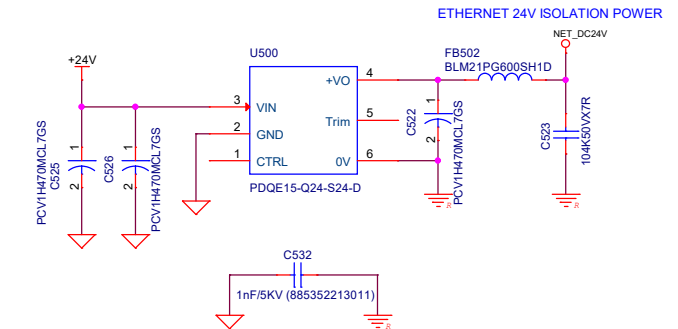
## ETHERNET NETWORK 24V



### Isolated RS-232 Line PC



### ETHERNET 24V ISOLATION POWER( OPTION)



( FAN#1 SENSE TOP )

( LED 19TR1A24 )

( Blower Fan Red LED ( TOP ) )

( Blower Fan Green LED ( TOP ) )

( FAN#2 SENSE LOWER )

( LED 19TR1A24 )

( Blower Fan Red LED ( LOWER ) )

( Blower Fan Green LED ( LOWER ) )

The schematic diagram illustrates the LED control system for the Data Processor, featuring four distinct LED channels:

- Data Processor #1 (LED\_DP1\_G):** Utilizes a 53375-0210 LED driver (J1c04) connected to a +24V rail through a 470R 3216 resistor (R601). The driver output passes through a TLP291GB LED (U602) and a 470R resistor (R603) to a +3.3V rail.
- Data Processor #2 (LED\_DP2\_G):** Utilizes a 53375-0210 LED driver (J1c05) connected to a +24V rail through a 470R 3216 resistor (R614). The driver output passes through a TLP291GB LED (U604) and a 470R resistor (R611) to a +3.3V rail.
- Temperature (LED\_TEMP\_R and LED\_TEMP\_G):** Utilizes a 53375-0310 LED driver (J1c06) connected to a +24V rail through a 470R 3216 resistor (R616). The driver output passes through a TLP291GB LED (U605) and a 470R resistor (R615) to a +3.3V rail. A second channel (LED\_TEMP\_G) uses a TLP291GB LED (U606) and a 470R resistor (R617) to a +3.3V rail.
- Power Distribution Assembly (LED\_PSU\_R and LED\_PSU\_G):** Utilizes a 53375-0310 LED driver (J1c07) connected to a +24V rail through a 470R 3216 resistor (R600). The driver output passes through a TLP291GB LED (U608) and a 470R resistor (R621) to a +3.3V rail. A second channel (LED\_PSU\_G) uses a TLP291GB LED (U609) and a 470R resistor (R622) to a +3.3V rail.

All LEDs are connected to a common ground. The +24V and +3.3V power rails are indicated by red lines and symbols.