HW_Block Diagram

Serial Flash
MX25L6433F**(8MB)** ←SPI→ MCU

Bluetooth Module (BoT-nLE523D) ←UART→ MCU
Bluetooth 5.0 ←→ Bluetooth Module
←GPIO→

JTAG ←→ MCU

X'tal(8MHz) ←→ MCU

MCU

NXP S32K148
Arm Cortex-M4F
80 MHz (RUN mode)
or 112 MHz
(HSRUN mode)
2MB Flash
256KB RAM
4KB Cache
144pin LQFP

LAM Block

LED1_N/P → **ISELED**(A3A-FKG) — SIO_N/P1 → **ISELED**
LED2_N/P → **ISELED** — SIO_N/P2 → **ISELED**
LED3_N/P → **ISELED** — SIO1_N/P3 → **ISELED**
LED4_N/P → **ISELED** — SIO_N/P4 → **ISELED**

Single Ended   Differential

CAN_TX/RX ←→ **CAN** Transceiver **(TJA1042T/3)**

Power

⊖—◉—⊕

12V_5A

→ **PMIC (A8660) x 2** → 5V/5.3A → **ISELED**

→ **LDO (TMP1200)** → 5V/0.2A → **CAN**

→ **LDO (TMP1201)** → 3.3V/0.2A → **MCU, Serial Flash Bluetooth**
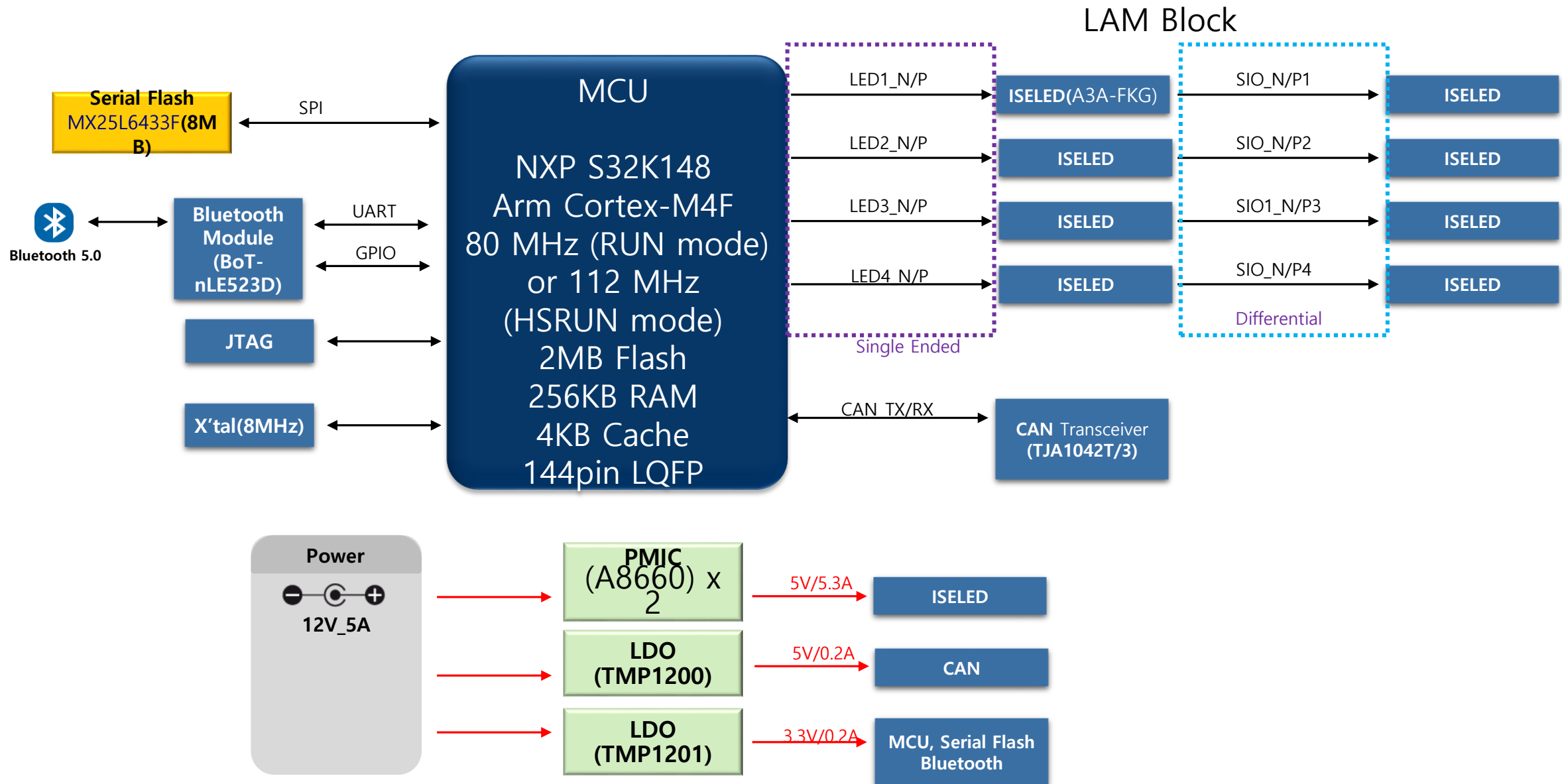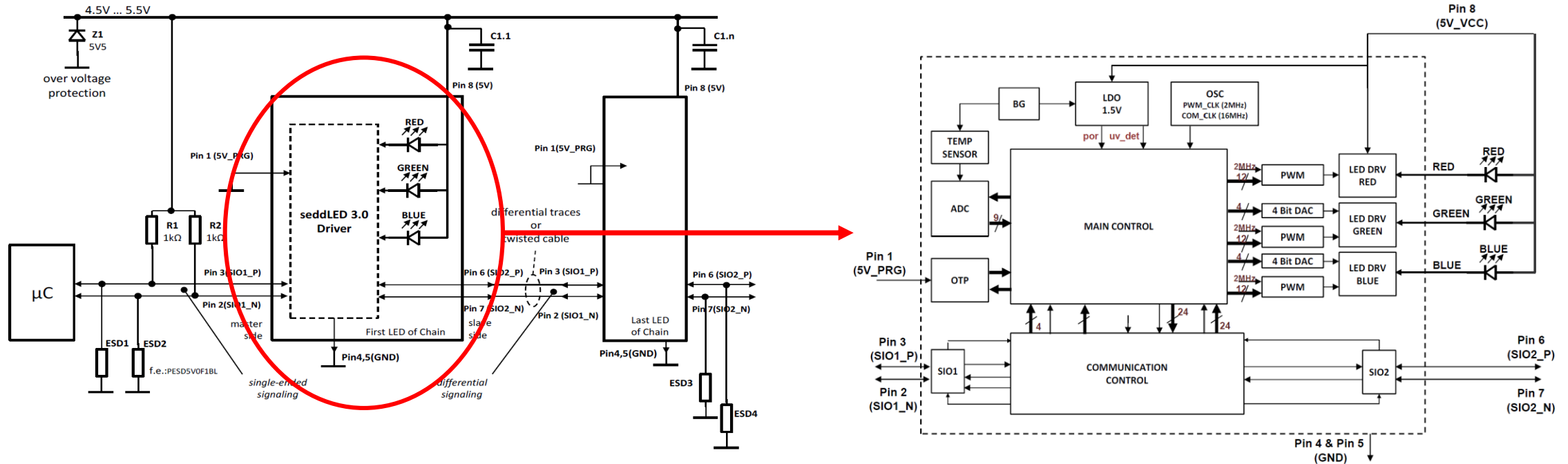
ISELED_diagram(seddLED3.0 A3A-FKG-RGB-1)

- Small package outline (LxWxH) of 3.2 x 3.3 x 1.35mm.
- Serial communication with ISELED® compliance.
- Bi directional, half-duplex, 2MBit/s, serial communication.
- Pre-Calibrated Blue & True Green LED color to 2nm range.
- 8 bit brightness resolution for red, green, and blue LED.
- Dominant Wavelength(nm) : R(619~625), G(524.5~526.5), B(459.5~461.5)
- Luminous Intensity(mcd) : R(400), G(1600), B(250)