

3. Operational Description

CAN Module

1. Power Circuit
 - 1-1. Car ACC power is inputted through the JP1. (Car ACC power is about 9V~14.8V)
 - 1-2. The input voltage converted into DC 5V through the U1 Linear Regulator. This voltage supplies "VCC".
The "VCC" voltage supplies MICOM, CAN Transceiver and LIN Transceiver.
2. LIN/CAN Transceiver Part
 - 2-1. U3 is high speed CAN Transceiver that provides an interface between the CAN protocol of U2 and the physical two-wire CAN bus of the user's car.
 - 2-2. U4 is the interface between the LIN master/slave protocol controller of U2 and the physical bus of HUD

Head Up Screen

1. Power Circuit
 - 1-1. "VIN" source of CAN Module inputted through the J1. (Car ACC power is about 9V~14.8V)
The input Voltage supplies "UBAT_14V" and "UBAT_TOLED".
 - 1-2. The "UBAT_14V" converted into DC 5V through the P_U1 DC/DC down converter. This voltage supplies "VSYS".
The "VSYS" is converted into DC 3.3V again by way of the U11 DC/DC down converter and U4 Low drop output regulator.
This voltage is "VDDIO3V3" and "VDD3V3 MCU"
The "VDDIO3V3" converted into U11 supplies Wifi module, Serial flash and TOLED VDD.
The "VDD3V3 MCU" converted into U4 supplies MICOM.
 - 1-3. The "UBAT_TOLED" is converted into 15V through the L5 DC/DC up converter.
The "VCC_TOLED_15V" converted into L5 supplies TOLED VCC.
2. Wifi Transmission/Reception Part
 - 2-1. This transmits and receives RF signals of 2.412~2.462 GHz through an ANT1 chip antenna by using the U6 2.4GHz Wifi Module.
 - 2-2. The wireless front end uses OFDM modulation.