

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.