

Bluetooth Circuit Description

Bluetooth controller (U3 on schematics): National Semiconductor LMX5452 Integrated Bluetooth 1.2 Baseband Controller and Radio. Controller communicates to main CPU board via the USB interface on J1. The LMX5452 is a one-chip solution that only requires an external crystal, an EEPROM (to store Bluetooth address and code updates), and 3.3V and 2.8V power sources.

Crystal: 13.0000MHz (Y1)

Power for module: 3.3V from main CPU board, 2.8V generated locally via linear regulator, National Semiconductor LP3985IM5-2.8 (U6).

Antenna connector (J5): Hirose U.FL-SMT-R

Schematics: DRS part# 9200-17854-0001

Changes to schematic to meet FCC requirements: Location C42 is populated with a 1.8pF capacitor (C42 is shown as a “no-stuff” on schematics). This is the only change to the schematics. The bill-of-materials is correct.