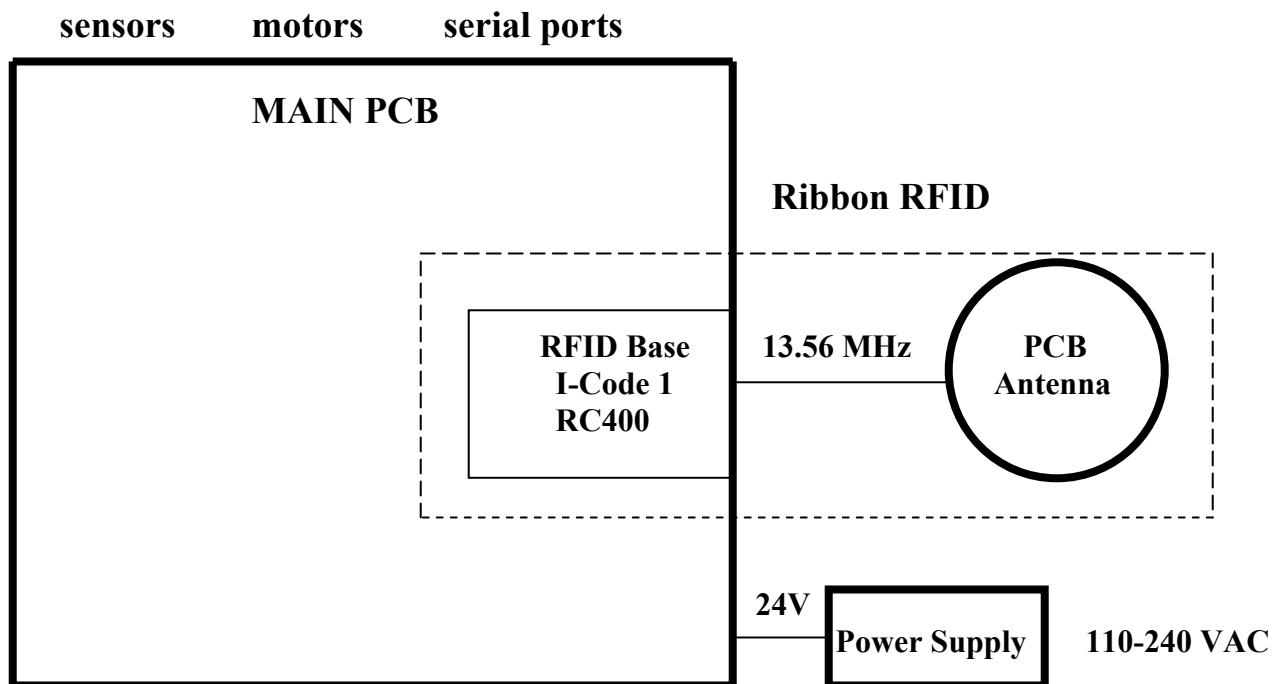


Ribbon RFID system technical description

1. Block diagram with clock frequencies labeled



2. Modes of operation

There are following modes of operation: RFID standby, and RFID communications between the controller and ribbon RFID tag.

During standby mode, RF field is off.

RFID is active for 0.2-1 sec. There is RFID tag Read/Write operation going on during this time period.

RFID base uses Philips I-CODE1 13.56MHz.

Inductive coupling principle is used for RF portion of the system

3. Antenna and ground system description

PCB antenna used is a standalone board. It has 4 turns / traces on internal PCB layers, and a shield on external PCB layers (open loop) . The antenna is connected to the base station via 4-wire cable.

Also see antenna schematic and PCB layout attached as separate files.

The power cord does not have connection to safety ground.

PCB antenna size is: 2"x1.75"

