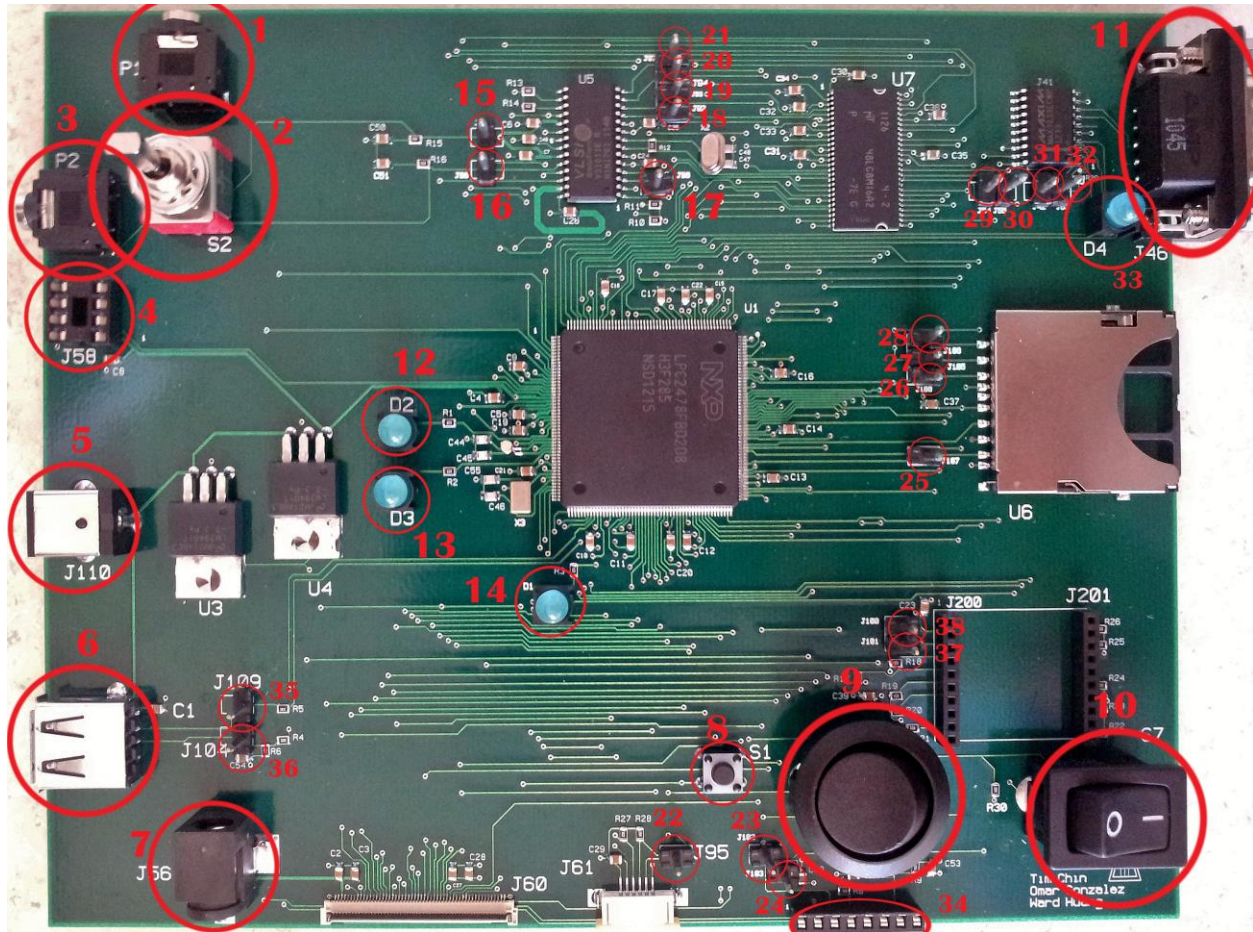


Controls and Indicators



1 3.5 Audio jack line output (P1)

2 Pull-Throw switch (S2)

This switch toggles between line in and MP3 decoder to audio jack output P1.
(NOTE: Switch must be held at position desired, if not it will move back to original position)

3 3.5 Audio jack line input (P2)

4 Light sensor connector (J58)

Must be visible to collect ambient light readings.

5 5V barrel jack connector (J110)

This is the 5V barrel jack connector which provides the main source of power for most modules on the board.

6 USB input port

7 19V barrel jack connector (J56)

This barrel jack connector will supply the 19V requirement to light up the LCD display.

8 Push button (S1)

Push button used as a reset for different modules on the board, including the CPU, music decoder, the LCD and the motion detector.

9 On-On switch

Switch that toggles between External Interrupt 0 (Capacitive Touch Panel) and boot loader pin.

10 On-Off switch

Switch that toggles between high/low voltage for boot loading.

11 RS232 Connector (J46)

Connector used to program the CPU.

12 LED (D2)

LED indicator used to indicate when the CPU is in Reset state. This is a 3.3 V pin. LOW on this pin indicates LPC2478 being in Reset state.

13 LED (D3)

LED indicator used to indicate when RTC alarm is generated. This is a 1.8 V pin. It goes HIGH when a RTC alarm is generated.

14 LED (D1)

USB port 1 GoodLink LED indicator. It is LOW when device is configured (non-control endpoints enabled), or when host is enabled and has detected a device on the bus. It is HIGH when the device is not configured or when host is enabled and has not detected a device on the bus, or during global suspend. It transitions between LOW and HIGH (flashes) when host is enabled and detects activity on the bus.

15 Header pin (J99)

Header connected to the music decoder's right channel output.

16 Header pin (J98)

Header connected to the music decoder's left channel output.

17 Header pin (J96)

Header connected to the music decoder's byte synchronization signal.

18 Header pin (J92)

Header connected to the music decoder's chip select input, which is active LOW.

19 Header pin (J93)

Header connected to the music decoder's clock for serial bus.

20 Header pin (J94)

Header connected to the music decoder's serial input.

21 Header pin (J97)

Header connected to the music decoder's serial output, which is active when XCS=0, regardless of XRESET.

22 Header pin (J95)

Header connected to the capacitive touch panel's serial I2C data pin.

23 Header pin (J102)

Header connected to the motion detector's RXD receive data.

24 Header pin (J103)

Header connected to the motion detector's TXD transmit data.

25 Header pin (J107)

Header connected to the SD connector's command pin.

26 Header pin (J108)

Header connected to the SD connector's data input/output.

27 Header pin (J105)

Header connected to the SD connector's data input/output.

28 Header pin (J106)

Header connected to the SD connector's data input/output.

29 Header pin (J54)

Header connected to MAX Level shifter T2-out.

30 Header pin (J55)

Header connected to MAX Level shifter R2-in.

31 Header pin (J42)

Header connected to MAX Level shifter R2-out.

32 Header pin (J53)

Header connected to MAX Level shifter T2-in.

33 LED (D4)

Indicator LED, turns on when data is detected from RS232 connector.

34 PIR connector

Connector used to mount motion detector module onto the board.

35 Header pin (J109)

Header connected to USB port's data receive (RXD) line.

36 Header pin (J104)

Header connected to USB port's data transmit (TXD) line.

37 Header pin (J101)

Header connected to the Wifi's UART-TX (8-mA drive, 3.3-V tolerant).

38 Header pin (J100)

Header connected to the Wifi's UART-RX (3.3-V tolerant).