Handheld Compass

Battery (+3.7V)

USB (+5V)

USB (data)

LCD Display

Battery (chrg.)

**Level 0**

Magnetometer

μC

LCD

PMIC

Batt

USB (data)

USB (+5V)

+3.3V

I2C

SPI

Batt. (chrg)

Compass Display

+3.3V

**Level 1**

μC

ATmega32u4

+3.3V

USB +5V

USB Data

I2C

SPI

I2C

SPI

**Level 0**