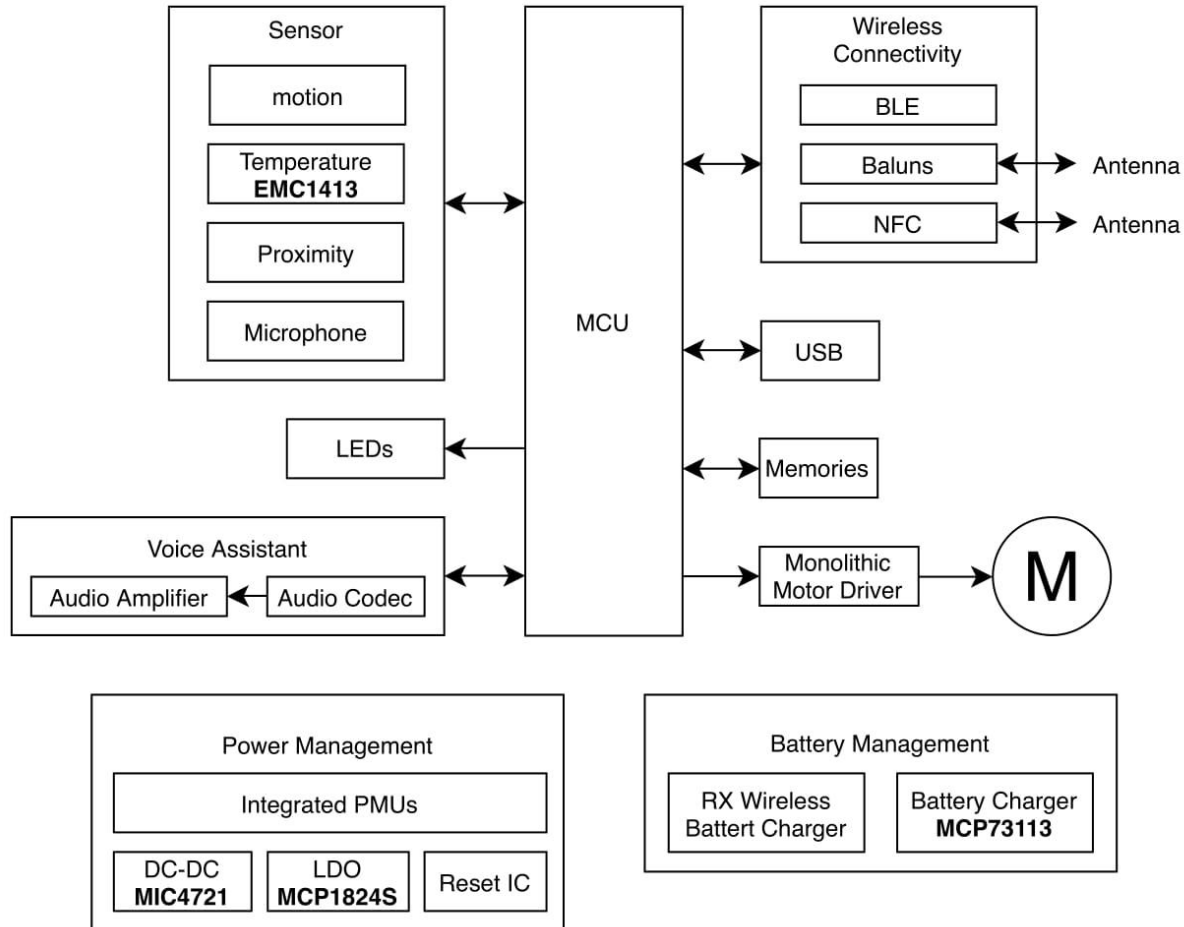


# Consumer battery charger - Block Diagram



# Consumer battery charger - Parts

---

## Current Sense Amplifiers

Product Name	Description	Features
MCP6C04	Zero-Drift, 52V High-Side Current Sense Amplifier	3 to 65 Input, 500kHz Bandwidth, 100V/V Gain, 490uA

## Op-Amp

Product Name	Description	Features
MCP6401	1 MHz, 45 $\mu$ A Op Amps	Rail to Rail In/Out, 1Mhz Bandwidth, 45uA Iq, 4.5mV Vos
MCP6411	1 MHz Operational Amplifier with EMI Filtering	1.7 to 5.5V Vin, 1Mhz Bandwidth, 47uA Iq, 1mV Vos

## Battery Charger

Product Name	Description	Features
MCP73830L	Single-Cell Li-Ion/Li-Polymer Battery Charge Management Controllers in 2x2 TDFN	4.2V Battery charger voltage, 3.75 to 6V Vin, 20 To 200mA Charge current

## USB Power Switches

Product Name	Description	Features
UCS1001-1	USB Poer Power Controller with Charger Emulation	2.9 to 5.5V Vin, I/O Interface, USB Charging

# Consumer battery charger - Parts

---

## LDO

Product Name	Description	Features
MIC5236	Low Quiescent Current uCap LDO Regulator	2.3 to 30V Vin, 150mA Iout, 2.5 to 5V Vout
MIC5367	High Performance 200mA Peak LDO	2.5 to 5.5V Vin, 200mA Iout, 1.2 to 3.3V Vout
MIC5317	Single, High Performance 150mA LDO	2.5 to 6V Vin, 150mA Iout, 1.0 to 3.3V Vout
MCP1700	Low Quiescent Current LDO	2.3 to 6V Vin, 250mA Iout, 1.8 to 5.0 Vout
MIC5367	High Performance 200mA Peak LDO	2.5 to 5.5V Vin, 200mA Iout, 1.2 to 3.3V Vout

## Buck Converter

Product Name	Description	Features
MIC4720	2MHz 2A Buck Regulator	2.7 to 5.5V Vin, 5V Vout(max), 2A Iout 2Mhz Switching Freq
MCP1612	1.4MHz 1A Synchronous Buck Regulator	2.7 to 5.5V Vin, 0.8 to 5.0V Vout, 1A Iout, 1.4Mhz Switching Freq

# Consumer battery charger - Parts

---

## Voltage Reference

Product Name	Description	Features
MCP1501	High-Precision Buffered Voltage Reference	1.25 Vout, 0.1% Initial Accuracy
MCP1612	1.4MHz 1A Synchronous Buck Regulator	2.5 Vout, 1% Initial Accuracy

## Load Switch

Product Name	Description	Features
MIC2007	Programmable 0.2A - 2A Current Limit Single High-Side Switch w/Cslew + LdDschg	2.5 to 5.5V Vin, 2A Iout, 70mΩ Ron