

Application Layer (tasks)

Startup

Read sensors

OBDH package

Heartbeat

MPPT

Watchdog Reset

System Reset

Heater Control

Beacon package

Devices layer (Drivers abstraction)

Current Sensor

Voltage Sensor

Temperature Sensor

Power Converters

OBDH

MPPT

Leds

Media

Watchdog

Battery Manager

Heater

Beacon Radio

Drivers layer

DS2775

ADS1248

TLV341A

WDT

ADC

SPI

Onewire

TCA4311A

TPS54x0

MAX9934

PWM

Flash

GPIO

UART

I²C slave

Hardware Abstraction Layer
(MSP Driver Library)

Hardware