

# Interface Task List

**Interface:** USART3

**Used By:** UART Thread, IHU

**Specification:** 19200 Baud, no flow control

**Development:**

Functionality	Completed	Tested
TX Bytes	Yes	Yes
RX Bytes	Yes	Yes
Parse Commands	Yes	Yes
Documentation	Yes	

**Interface:** UART1/4

**Used By:** Debug output (UART1 on dev. Board, UART4 on final release)

**Specification:** 19200 Baud, no flow control, Debug output

**Development:**

Functionality	Completed	Tested
TX Bytes	Yes	Yes
Documentation	Yes	

**Interface:** SPI 1

**Used By:** Main Thread, Camera Thread, SPI Flash

**Specification:** 8Mbit SPI Flash, 66 MHz maximum bus speed (dev. Board), 1Mbit SPI MRAM (40 MHz maximum) release

**Development:**

Functionality	Completed	Tested
Write Byte	Yes	Yes
Write Bytes	Yes	Yes
Read Byte	Yes	Yes
Read Bytes	Yes	Yes
Erase Sector/Block	Yes	Yes
Threadsafe	Yes	No
Documentation	Yes	

**Interface:** SCCB 1

**Used By:** Camera Thread

**Specification:** OmniVision SCCB 400 kHz (Bitbang)

**Development:**

Functionality	Completed	Tested
Write Register	Inwork	No
Read Register	No	No
Configure Camera	Inwork	No
Confirm Sanity	No	No
Documentation	Inwork	

**Interface:** FIFO

**Used By:** Camera Thread, Camera, FIFO

**Specification:** Dual Port DRAM w/ independent write/read pointers

**Development:**

Functionality	Completed	Tested
Initialize	No	No
Read Byte	No	No
Read 640x8 Bytes	No	No
Reset	No	No
Documentation	No	

# Threading Task List

## UART Thread

### Development:

Functionality	Completed	Tested
Rx events from peripheral	Yes	Yes
Tx signals to Main Thread	No	No

## Main Thread

### Development:

Functionality	Completed	Tested
Rx signals from UART Thread	No	No
Wake Camera Thread	No	No
Rx signals from Camera Thread	No	No
Change Thread Priorities	No	No

## Camera Thread

### Development:

Functionality	Completed	Tested
Sleep	No	No
Wake on command	No	No
Tx signals to Main Thread	No	No
Spawn Compressor Thread	No	No

## Compressor Thread

### Development:

Functionality	Completed	Tested
Return status on completion	No	No

# Compressor Task List

## Development:

Functionality	Completed	Tested
PC Test on BMP image	Yes	Yes
PC Test on raw RGB values	Yes	Yes
PC Test with 444,422,420	Yes	Yes
uC Test with YCbCr	Inwork	No
UC Test with Camera	No	No
Documentation	Inwork	