P/N: ELVH-L02D HAAH-C N5A4
Data sheet page 10 for pin definition:
https://www.allsensors.com/datasheets/DS-0376_Rev_A.pdf

CODE	Pmin inH2O	Pmax inH2O	Pressure Mode	kPa	inH2O	kPa	inH2O	kPa	inH2O	kPa
F50D	-0.5	0.5	Differential	0.1	270	67	415	103	415	103
L01D	-1	1	Differential	0.2	270	67	415	103	415	103
L02D	-2	2	Differential	0.5	270	67	415	103	415	103
L04D	-4	4	Differential	1.0	300	75	415	103	415	103

L02D [-2 2]

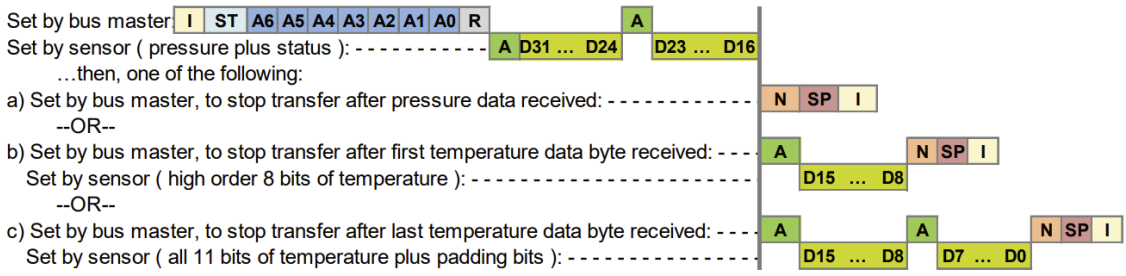
Pin Code	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8
1	GND	VS	SDA	SCL	N/C	N/C	N/C	N/C
2	GND	VS	MISO	SCLK	SS	N/C	N/C	N/C
3	N/C	VS	VOUT	GND	N/C	N/C	N/C	N/C
4	N/C	VS	VOUT	GND	-	-	-	-
5	GND	VS	SDA	SCL	-	-	-	-

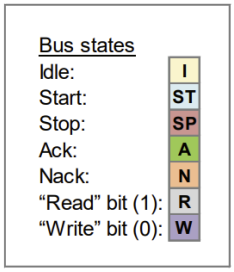
Pin Code 5

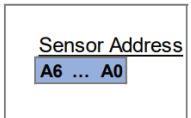
Figure 3 - I2C Communication Diagram

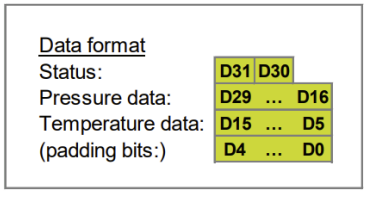
I2C Communications Diagram

1. Read Data (with examples of reading pressure, pressure plus 8 bits of temperature and pressure plus 11 bits of temperature)









Nominal : 0x20 - 0x1F (0010 0000 - 0001 1111)
High : 0x3F (0011 1111)
Low: 0x00 (0000 0000)

Need to ignore first two bits (status bits) and read more bytes

Adding 2 more bytes
Nominal: 1FF160 - 1FFC61 (0001 1111 1111 0001 0110 0000 - 0001 1111 1111 1100 0110 0001)
High: 3FFF62 (0011 1111 1111 1111 0110 0010)
Low: 000064 (0000 0000 0000 0000 0110 0100)

realizes I only needed to add one more byte, LSL 2 then LSR 2 to clear first 2 bits

Moving to Lua

Nominal: 1EAA - 1E8C (0001 1110 1010 1010 - 0001 1110 1000 1100)
High: 3FFF (0011 1111 1111 1111)
Low: 0000 (0000 0000 0000 0000)

Code written:
File output is SENSOR_DATA.csv in the main directory.
Converts data to [-2 2] inH2O

Code also now writes to .BIN which takes data casted to a string

Datasheets:
TCA: https://cdn-shop.adafruit.com/datasheets/tca9548a.pdf
ELVH Sensors: https://www.allsensors.com/datasheets/DS-0376_Rev_A.pdf