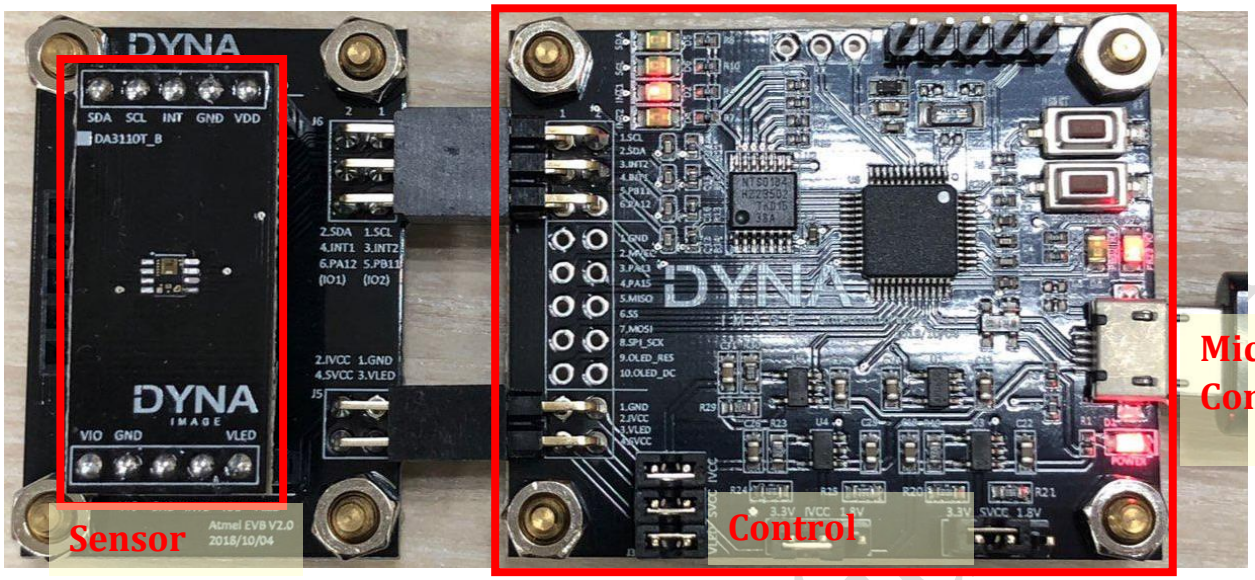
PX358J
Demo Program User Guide

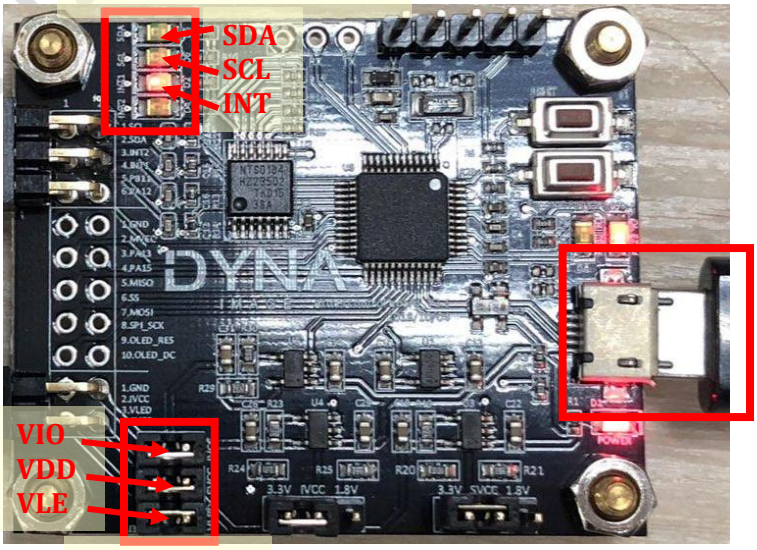
VERSION	DATE	CONTENT	AUTHOR
1.0	2021/7/28	Document creation	Brian Chiu

Hardware Setup



Sensor Board

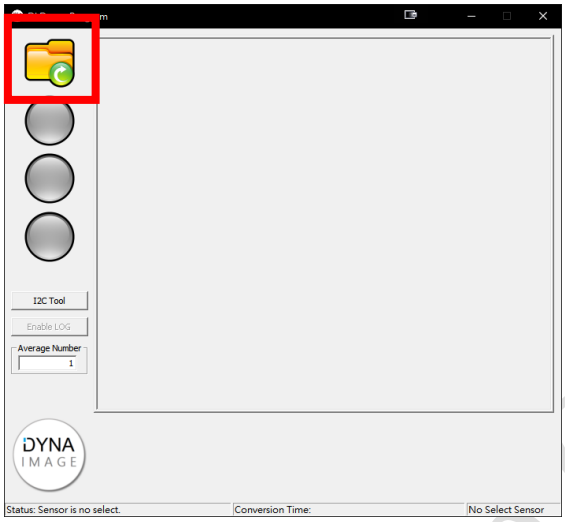
Control Board



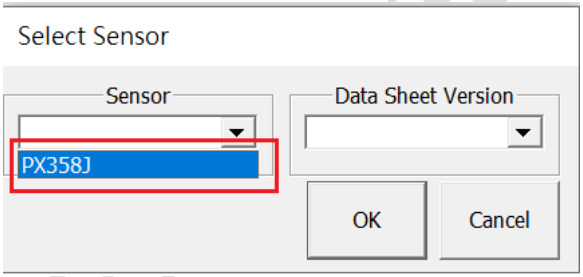
Software Setup

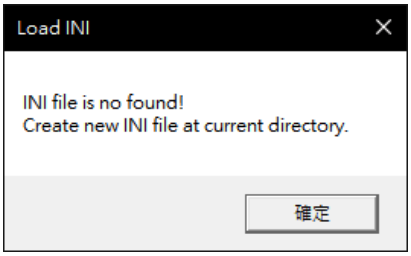
1. Open DI_Demo_Program.exe

2. Open sensor selects windows

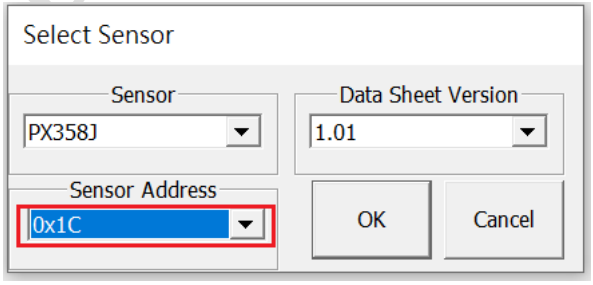


3. Select PX358J, then press OK. If it's your first use, you will get a "Load INI" message and then press OK.

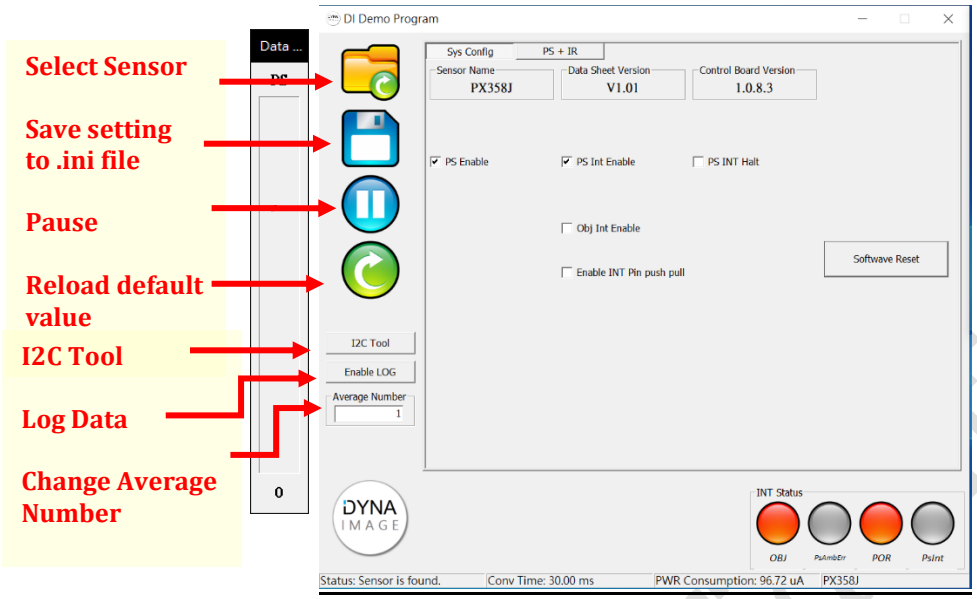




4. After first use, select sensor address of 0x1C when you load PX358J_v1.01.ini file.



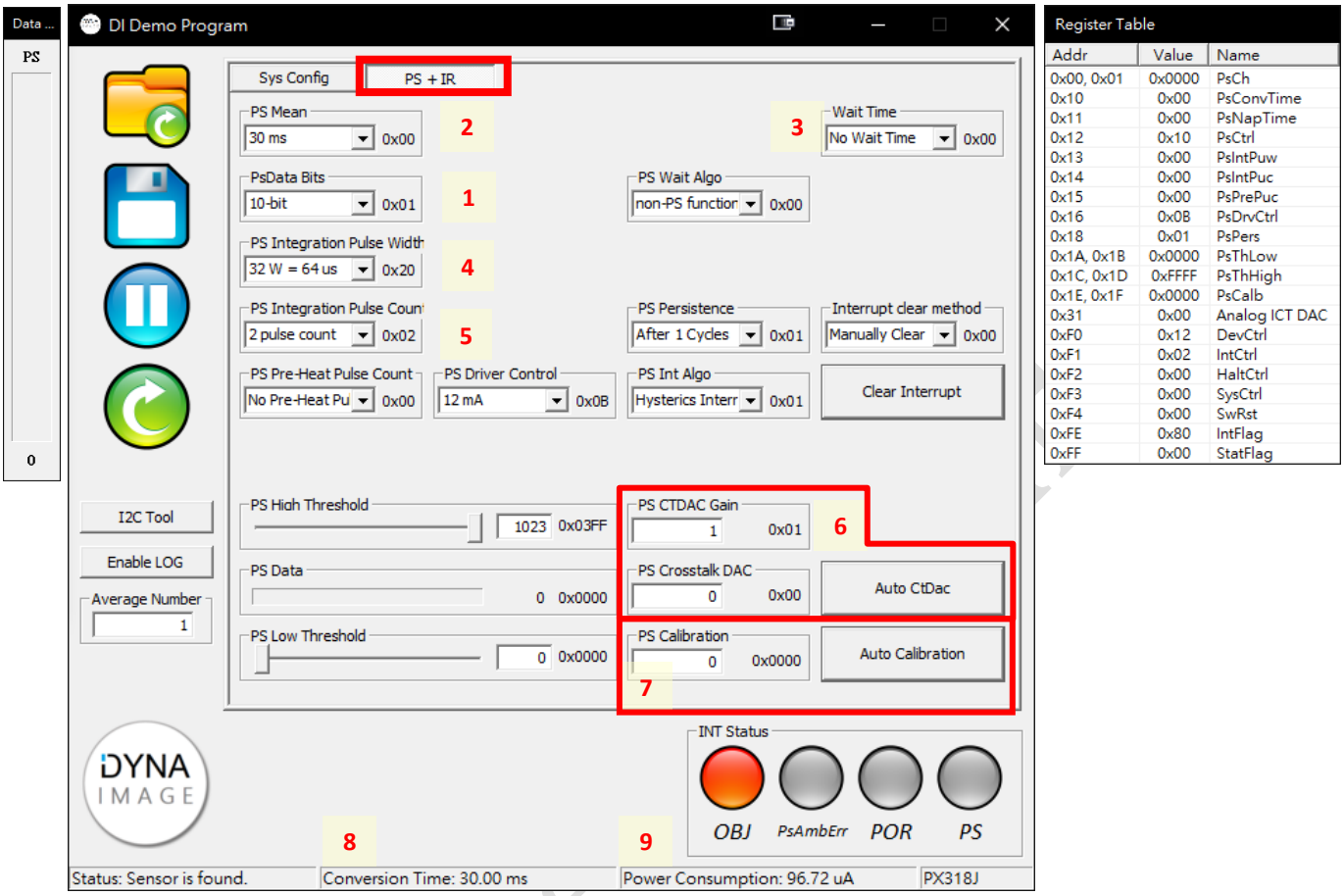
The user interface of Sys Config Tab is shown as follow:



Register Table

Addr	Value	Name
0x00, 0x01	0x0000	PsData
0x4F	0x00	WaitTime
0x60	0x15	PsCtrl
0x61	0x20	PsPuw
0x62	0x02	PsPuc
0x63	0x00	PsPreCtrl
0x64	0x08	PsDrvCtrl
0x65	0x11	PsDacCtrl
0x67	0x00	PsCtDac
0x69, 0x6A	0x0000	PsCal
0x6B	0x11	PsAlgoCtrl
0x6C, 0x6D	0x0000	PsThLow
0x6E, 0x6F	0x03FF	PsThHigh
0xF0	0x02	DevCtrl
0xF1	0x03	IntCtrl
0xF2	0x00	HaltCtrl
0xF4	0x00	SwRst
0xFE	0x10	IntFlag
0xFF	0x80	StatFlag

The user interface of PS+IR Tab is shown as follow:



1. PsData Bits: Change PS resolution bit.
2. PS Mean Time: Internal average function.
3. Waiting Time: Internal waiting time for power saving.
4. PS Integration Pulse Width: Change PS sensitivity.
5. PS Integration Pulse Count: Change PS sensitivity.
6. Reduce PS crosstalk impact by analog hardware function.
   - PS CTDAC Gain: CtDac Gain, from x1 to x15 ratio.
   - PS Crosstalk DAC: CtDac Step, from 0 to 96 step.
   - Auto CtDac: Calculate the CtDac value with software algorithm.
7. Reduce PS crosstalk impact by digital hardware function.
   - PS Calibration: PS data calibration from 0 to 65535.
   - Auto Calibration: Get 20 samples average then write to PS Calibration register.
8. Based on above settings, it will automatically calculate PX318J conversion time.
9. Based on above settings, it will automatically calculate total PX318J power consumption.

Important Notice and Disclaimer

DI reserves the right to make changes to this document and its products and specifications at any time without notice. Customers should obtain and confirm the latest product information and specifications before final design, purchase or use.

DI makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose, nor does ***DI*** assume any liability for application assistance or customer product design. ***DI*** does not warrant or accept any liability with products which are purchased or used for any unintended or unauthorized application.

No license is granted by implication or otherwise under any intellectual property rights of ***DI***.

DI products are not authorized for use as critical components in life support devices or systems without express written approval of *DI*.