CT11132 Controller Board Specification

PCAP EETI® EXC80W32 USB and I²C

Sustaining Quality,
Exceeding Expectations

DawarTouch®

DAWAR
THINKING BEYOND THE TOUCH
921 Ridge Ave., Pittsburgh, PA 15212
PH: 800-366-1904 | E-mail: sales@dawar.com
dawar.com

January 27, 2020
Rev B

1. General Description

The CT11132 is a programmed to work with 8.0in Dawar sensor DW03046. The unprogrammed board is CT11121. The board uses the EETI® EXC80W32 controller. The board supports both USB 2.0 full speed and I²C. The I²C connector is not populated on the base board. Dawar can provide custom SKUs with different I²C headers.

For more information on the EETI controller contact Dawar Technologies.

2. Functional Description

The CT11132 controller supports the following features:

- ▶ Up to 10 finger touches
- ▶ Glove touches
- ▶ Thick cover lenses (up to 4mm glass, 2mm plastic)
- ▶ Greater than 100Hz report rate
- ▶ Low latency (<10ms for first touch report from idle mode)
- ▶ Automatic self-calibration
- ▶ Aggressive noise avoidance and noise cancellation features

Additional tuning support from Dawar is available for specialized applications.

3. Electrical Specifications

3.1. USB Interface

Parameter	Min	Typ	Max	Units	Remarks
Digital Power Supply (VDD)	-	5	-	V	USB standard
Active Current	-	90	-	mA	Note 1
Sleep Current	-	1	-	mA	
X Electrodes	-	-	21	-	
Y Electrodes	-	-	27	-	

Note 1: Active power depends on configuration settings and number of touches.

3.2. I²C Interface

Parameter	Min	Typ	Max	Units	Remarks
Digital Power Supply (VDD)	3.3	5.0	5.0	V	
Active Current	-	90	-	mA	Note 1
Sleep Current	-	1	-	mA	
X Electrodes	-	-	21	-	
Y Electrodes	-	-	27	-	

Note 1: Active power depends on configuration settings and number of touches.

DAWAR
THINKING BEYOND THE TOUCH
921 Ridge Ave., Pittsburgh, PA 15212
PH: 800-366-1904 | E-mail: sales@dawar.com
dawar.com

January 27, 2020
Rev B

4. Connector

Connector locations are shown below:
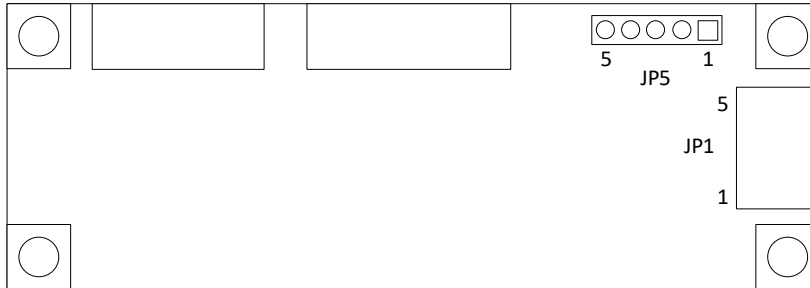
4.1. USB Interface

JP1 USB	
Pin	Description
1	GND
2	5V
3	GND
4	D+
5	D-

USB board connector part number is Most Well 2WF2HD-201505T121A01 (compatible with JST S5B-PH-K-S).

Mating cable connector is Most Well 2HG2CT-201105NPA1A01 with crimp contact 2F2CA-PT1701 (compatible with JST PHR-5 and SPH-002T-P0.5L).

4.2. I²C Connector

Pin	Description	Note
1	GND	
2	SDA	I2C data with 4.7k pull-up to 3.3 V
3	SCL	I2C clock with 4.7k pull-up to 3.3 V
4	VDD	
5	/INT	Active low interrupt indicating data is available with 3.3k pull-up to 3.3 V

I²C connector is not populated by default. Header layout is standard 0.1" center thru-hole. Dawar can provide custom SKU with customer specified header.

5. Environmental Specifications

Parameter	Min	Typ	Max	Units	Remarks
Operating Temperature	-40	-	85	°C	
Storage Temperature	-40	-	90	°C	
Relative Humidity	0	-	95	%RH	Note 1

Note 1: RH is defined at 60°C, non-condensing.

6.   Operating System Support

Operating System	Supported	Remarks
Microsoft Windows XP	Yes	Note 1
Microsoft Windows 7	Yes	Note 2
Microsoft Windows 8	Yes	Note 2
Microsoft Windows 10	Yes	Note 2
Linux	Yes	Note 3

Note 1: Requires driver. Contact Dawar for support.
Note 2: Compatible with Microsoft HID. No driver required.
Note 3: Kernel version 2.6.38 or later. Refer to http://www.eeti.com.tw/drivers_Linux.html.
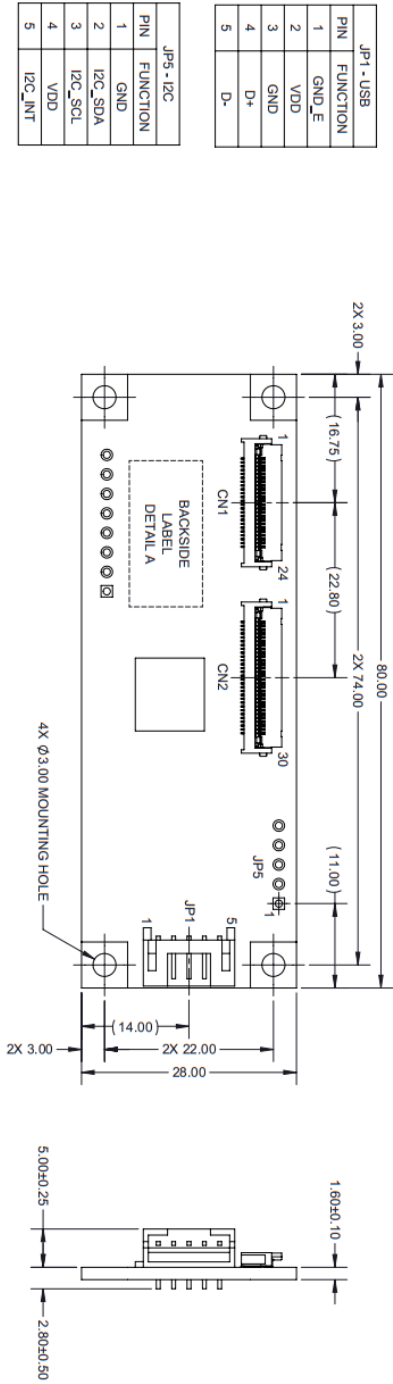
7.   Product Life

Dawar Technologies is committed to providing products stability and support to our valued customers throughout the life of the product. All Dawar Touch products meet the following minimum requirements:

- ▶ 5 year minimum product lifecycle
- ▶ 12 month end of life (EOL) notification
- ▶ Last time buy option with EOL notification
- ▶ 60 day change notification for any change that affects form, fit, or function
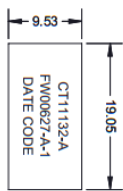
DAWAR
THINKING BEYOND THE TOUCH
921 Ridge Ave., Pittsburgh, PA 15212
PH: 800-366-1904 | E-mail: sales@dawar.com
dawar.com

January 27, 2020
Rev B

NOTES:

1. CONNECTOR FOR JP1: MOST WELL 2WF2HD-20150ST121A01 (COMPATIBLE WITH JST S5B-PH-K-S)
   MATING CONNECTOR FOR JP1: MOST WELL HOUSING 2HG2CT-20110SNPA1A01 AND CRIMP CONTACT
   2F2CA-PT1701 (COMPATIBLE WITH JST HOUSING PHR-5 AND CRIMP CONTACT SPH-002T-P0.5L)

2. DIMENSIONS IN PARENTHESIS ARE FOR REFERENCE ONLY.

JP1 - USB

PIN	FUNCTION
1	GND_E
2	VDD
3	GND
4	D+
5	D-

JP5 - I2C

PIN	FUNCTION
1	GND
2	I2C_SDA
3	I2C_SCL
4	VDD
5	I2C_INT

CT11132-A
FW00627-A-1
DATE CODE

LABEL
DETAIL A

9.53
19.05

2X 3.00
(16.75)
(22.80)
2X 74.00
80.00
(11.00)

CN1
BACKSIDE
LABEL
DETAIL A

CN2

JP5

4X Ø3.00 MOUNTING HOLE

JP1

(14.00)
2X 3.00
2X 22.00
28.00

5.00±0.25
1.60±0.10
2.80±0.50

REVISIONS

ITEM REV.	DWG REV.	ECO	DESCRIPTION	DWN	DATE
A	-	1512	INITIAL RELEASE	EMK	07/10/19
A	2		UPDATED CONNECTOR PART # FOR JP1	EMK	01/08/20

THIRD ANGLE PROJECTION

![DawarTouch logo]

1919 NORTH LINCOLN AVENUE, PITTSBURGH, PA 15233
PHONE: 1.800.366.1904 +412.322.8880
FAX: 412.322.8881
E-MAIL: SALES@DAWAR.COM — WWW.DAWAR.COM

BASE CONTROLLER		ITEM/DRAWING NO.	
CT11121-A		CT11132-A	
FIRMWARE	UNIFORMITY TABLE	UNIT	TOLERANCE
FW00627-A-1	UT00060-A	MM [INCH]	±0.25 [0.010] UNLESS SPECIFIED
DESCRIPTION			
PCB EETI 84H 24x30 USB+I2C STD - EXC84W2430SMAG			

		SHEET	DRAWN BY	DATE	DWG. REV.
		1 OF 1	EMK	07/10/19	2

![DAWAR logo] THINKING BEYOND THE TOUCH
921 Ridge Ave., Pittsburgh, PA 15212
PH: 800-366-1904 | E-mail: sales@dawar.com
dawar.com

January 27, 2020
Rev B

Revision History

Revision	Date	Content	Author
A	9-13-2019	Initial Release	Tony Gray
B	1-27-2020	Added JST part numbers for USB connector	Tony Gray

DAWAR
THINKING BEYOND THE TOUCH
921 Ridge Ave., Pittsburgh, PA 15212
PH: 800-366-1904 | E-mail: sales@dawar.com
dawar.com

January 27, 2020
Rev B