Specification of 80W46 Controller

Version

Version	Date	Modification	Remark
V1	2018/08/07	The first version	

1. Introduction

8046C3.P1.V1 is a projected capacitive touch screen controller based on EETI's high-performance capacitive chip 80W46. Its high-voltage drive signal achieves high signal-to-noise ratio and better sensitivity of the broadband interference. At the same time, its different operating frequencies are also supported to avoid narrow-band interference.

2. Characters

USB, S-232 and I2C interface

Waterproof

Active Pen

Support thin gloves

Support different touch sensor structures- OGS, SITO, DITO, G/F, G/F/F, G/G

Channels: TX23, RX41

Support Maximum 15.6 inch touch screen

Meet the Restriction of Hazardous Substances (RoHS) standards

Meet electromagnetic compatibility (EMC) standards

3. Operating System

System	Version	Interface
Windows	Windows 10 IOT (#1) /Windows 10/Windows8/Windows7 WindowsVista/Windows2000/WindowsXP (#1: Windows 10 IOT: support it with inbox driver only) (#2:I2Cinterface:needadditionalsystem configuration)	USB/RS232I2C(#2)
Win CE	Win Embedded Compact 2013 / Win Embedded Compact 7 WinCE 6 /WinCE.Net	USB/RS232
Linux	CentOS, Debian, Fedora, Gentoo, Mandrake (Mandriva), Meego, Red Hat, Slackware, SuSE (OpenSuSE), Ubuntu (Xubuntu) and Yellow Dog etc. Support most 32/64 bit Linux distribution versions, including Kernel 2.6.x / 3.x.x / 4.x.x	USB/RS232 I2C
Android	Android 2.3 to latest version	USB /I2C
Mac	OSX 10.7.5 to 10.12	USB
QNX	RTOS V6.3 to V6.6	USB/ I2C

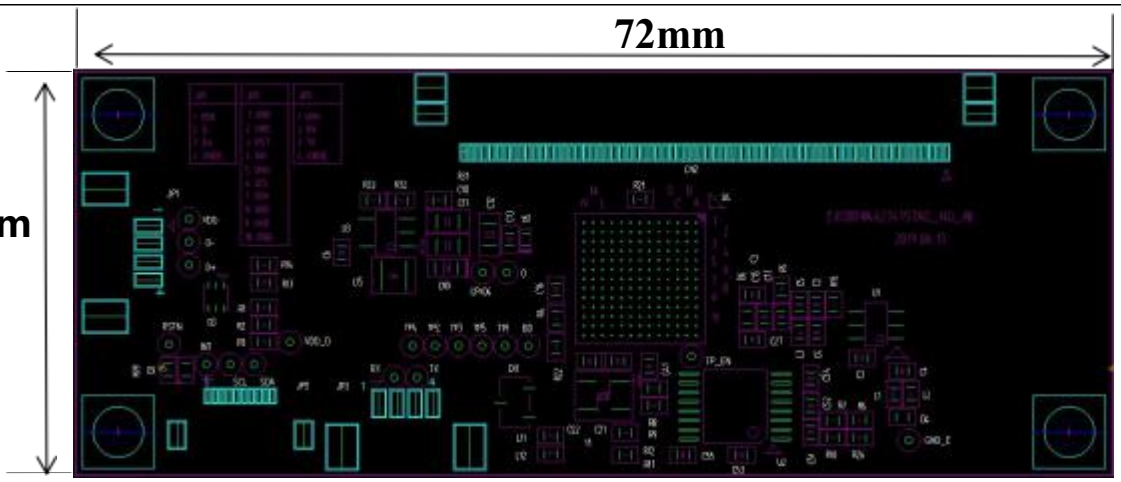
4. Technical Specification

Dimension	**72mm*28mm**
Channel	**TX:23** **RX:41**
Input Voltage	**3.5V-5.5V**
Working Temperature	**-40 to 85 ℃**
Storage Temperature	**-40 to 90 ℃**
Relative Humidity	**95% @ 60 ℃, noncondensible**
linearity	Line drawing accuracy: **1pt +/- 1mm** compensation **/10mm** touch accuracy **1pt +/- 1mm**
Resolution	**16384*16384**
Power Dissipation （mA）	Working Mode**: < 90mA** Idle Mode: decide on firmware
Report Rate	**>100 Hz**
Response Time	**< 25 ms**

5. Structure and Definition

5.1 Image

Front View



5.2 FPC Interface Definition

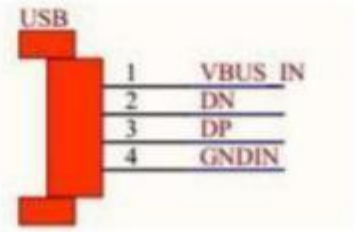
Connector J1 Compensation

连接器 J1, 68-Pin, Pin Pitch=0.5mm FPC+补强=0.3mm

No. 编号	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Definition 定义	ESD_DUMMY	TX1	TX2	TX3	TX4	TX5	TX6	TX7	TX8	TX9	TX10	TX11	TX12	TX13	TX14	TX15	TX16	TX17	TX18	TX19
编号	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
定义	TX20	TX21	TX22	TX23	ESD_DUMMY	ESD_SUMMY	RX41	RX40	RX39	RX38	RX37	RX36	RX35	RX34	RX33	RX32	RX31	RX30	RX29	RX28
编号	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
定义	RX27	RX26	RX25	RX24	RX23	RX22	RX21	RX20	RX19	RX18	RX17	RX16	RX15	RX14	RX13	RX12	RX11	RX10	RX9	RX8
编号	61	62	63	64	65	66	67	68												
定义	RX7	RX6	RX5	RX4	RX3	RX1	RX1	GNDIN												

5.3 Interface Definition

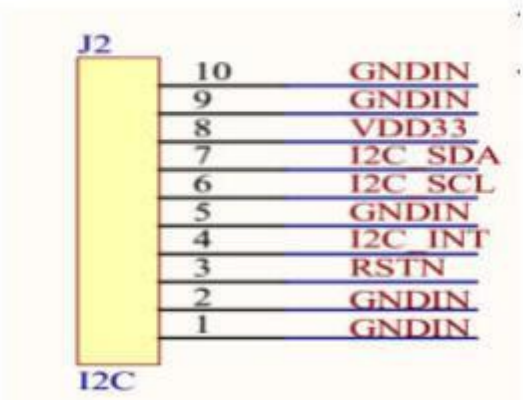
5.3.1 USB



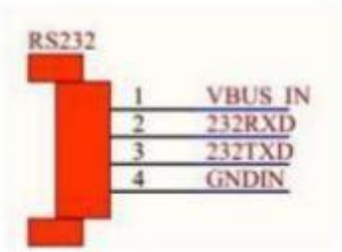
USB 接口/Pin 定义	CN1-ACES/53162-0419
1	VBUS-5V
2	DN
3	DP
4	GND

IIC interface definition

IIC 接口引脚定义



5.3.3 RS232



RS232 串口/Pin 定义	CN1-ACES/53162-0419
1	VBUSIN
2	RXD_IN
3	TXD_IN
4	GND

5.3.4 Connector Model

Connector 连接器	1st supplier 1st 供应商	2nd supplier 2nd 供应商	3rd supplier 3rd 供应商
J1.J2	广濑	NA	NA
USB	MOLEX/53261-0419	NA	NA
RS232	MOLEX/53261-0419	NA	NA

6. The Way for Connecting Controller and Touch panel