

## Single Chip Resistive Controller




For industrial system and mobile device designers trying to determine the maximized compact design, EETI's ready-to-go chipset solution make possible for entire touch controller unit to be integrated into the system main board.  
EETI's single chip resistive controllers are cost-effective and literally no extra development effort required.



Available selections including:

- ◆ Flash version (ETR4200)
- ◆ Highly integrated chip (ETR4000)
- ◆ Universal interfaces chip (Universal)
- ◆ Power Saving chip (Pluto)

Benefits :

- ◆ Industrial operating temperature.
- ◆ Ideal for space restricted mobile devices.
- ◆ Come with design references.
- ◆ Low integration effort.
- ◆ USB HID supported.
- ◆ 4/5 wire panel auto detection. (ETR4000/ETR4200)
- ◆ USB/RS232 interface auto detection. (ETR4000/ETR4200/Universal)

	 <b>ETR4200 USB / RS232 / Combo</b>					 <b>ETR4000 USB / RS232 / Combo</b>					 <b>ETR4000Q USB / RS232 / Combo</b>								
Feature	Flash version 4 / 5 Wire auto detection					OTP version with built-in 5V - 3.3V regulator 4/5 Wire auto detection					Highly Integrated OTP version with built-in Transistor 4/5 Wire auto detection								
Power Consumption	DC +3.3V 50mVpp maximum ripple					DC +3.3V 50mVpp maximum ripple					DC +3.3V 50mVpp maximum ripple								
Operating frequency	24MHz					24MHz					24MHz								
Operating Temperature	-40°C to +85°C					-40°C to +85°C					-40°C to +85°C								
Storage Temperature	-65°C to +150°C					-65°C to +150°C					-65°C to +150°C								
Relative Humidity	95% at 60°C, RH Non-condensing					95% at 60°C, RH Non-condensing					95% at 60°C, RH Non-condensing								
Current Consumption (Value vary depends on Panel)			4 Wire		5 Wire				4 Wire		5 Wire				4 Wire		5 Wire		
		Idle	Working	Idle	Working		Idle	Working	Idle	Working		Idle	Working	Idle	Working		Idle	Working	
	USB	21~22mA	25~29mA	26~30mA	39~58mA	USB	21~23mA	26~31mA	24~26mA	42~60mA	USB	21~23mA	26~31mA	24~26mA	42~60mA	RS232	24~26mA	30~35mA	24~26mA
	RS232	24~25mA	29~34mA	23~25mA	42~60mA	RS232	24~26mA	30~35mA	24~26mA	42~64mA	RS232	24~26mA	30~35mA	24~26mA	42~64mA				
Interface	USB : Full Speed (12Mbps) RS232 : 9600 bps, None parity 8 data bits, 1 stop bit (N81)					USB : Full Speed (12Mbps) RS232 : 9600 bps, None parity 8 data bits, 1 stop bit (N81)					USB : Full Speed (12Mbps) RS232 : 9600 bps, None parity 8 data bits, 1 stop bit (N81)								
Resolution	2048 x 2048					2048 x 2048					2048 x 2048								
Report Rate	USB : 200 points / sec. (Max.) RS232 : 160 points / sec. (Max.)					USB : 200 points / sec. (Max.) RS232 : 160 points / sec. (Max.)					USB : 200 points / sec. (Max.) RS232 : 160 points / sec. (Max.)								
Response Time	Max. 20ms					Max. 20ms					Max. 20ms								
Package	32 pin QFN					48 pin LQFP					32 pin QFN								
Package Dimension	5mm x 5mm x 1.1mm					7mm x 7mm x 1.1mm					5mm x 5mm x 0.9mm								
Green Product	RoHs Compliant					RoHs Compliant					RoHs Compliant								

	 <b>Universal USB / RS232 / PS2 / I<sup>2</sup>C / Combo</b>				 <b>Pluto RS232 / PS2 / I<sup>2</sup>C</b>	
Feature	Universal Interfaces Ideal for all type of resistive touch				Power Saver Ideal for battery powered devices	
Power Consumption	DC +3.3V / +5V 50mVpp maximum ripple				DC +3.3V 50mVpp maximum ripple	
Operating frequency	24MHz				16MHz	
Operating Temperature	-25°C to +85°C				-40°C to +85°C	
Storage Temperature	-25°C to +150°C				-55°C to +150°C	
Relative Humidity	95% at 60°C, RH Non-condensing				95% at 60°C, RH Non-condensing	
Current Consumption (Value vary depends on Panel)			5V		3.3V	
	Idle	45mA		30mA		
	Working	60mA		50mA		
	Suspend	20mA		20mA		
Interface	USB : Full Speed (12Mbps) RS232 : 9600 bps, None parity 8 data bits, 1 stop bit (N81) PS2 : PS2 compatible mouse				RS232 : 9600 bps, None parity 8 data bits, 1 stop bit (N81) PS2 : PS2 compatible mouse	
Resolution	2048 x 2048				2048 x 2048	
Report Rate	USB : 200 points / sec. (Max.) Other Interface : 160 points / sec. (Max.)				RS232/I2C : 160 points / sec. (Max.) PS2 : 120 points / sec. (Max.)	
Response Time	Max. 20ms				Max. 25ms	
Package	28 pin MLP				16 pin TSSOP	
Package Dimension	5mm x 5mm x 0.9mm				6.4mm x 5.1mm x 1.2mm	
Green Product	RoHs Compliant				RoHs Compliant	

