



# Tidal Touch Controller



### COMPLETE WINDOWS CE TOUCH SCREEN AND LCD INTERFACE SOLUTION

This complete touch panel solution by Tidal Engineering is a true time saver. Designed for Windows CE 2.0 through 3.0, this touch screen and LCD interface kit saves engineering time and effort, so it can be spent on application specific features.

The design is fully compatible with embedded single board computers including X86 units from Aaeon and Advantech. It connects through a 50 or 44 pin ribbon cable to the LCD connector on the SBC. All power and LCD signals come through this cable. In addition, a single RS-232 port connects the controller to the SBC.

The supplied CE drivers generate system mouse events and key events. All the firmware, Windows CE driver source and example application code are included.

Calibration software is provided to accommodate different 4 wire resistive touch screens.



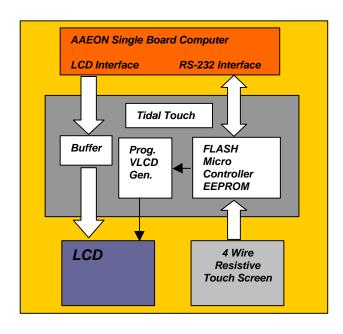
#### Tidal Touch Features:

- Touch screen controller, resistive, 4 wire, 10 bit.
- LCD interface compatible with 3.3 and 5.0V LCDs.
- Programmable LCD Voltage Generator and Contrast Adjustment.
- 8/16Bit LCD Interface Buffer.
- FLASH Programmable microcontroller supports in-system firmware upgrades.
- EEPROM data storage for non-volatile data:
   LCD contrast voltage level
   Touch screen calibration.
- Back light control with Lamp Life-Saver mode.
- Discrete digital input and LED outputs for enhanced user interface functionality.

#### Tidal Touch Driver Features:

- Programmable Soft Keys.
- Mouse and Soft Key areas controlled by registry.
- Lamp-Save and contrast adjustment commands.

## Tidal Touch Block Diagram



#### Typical Color LCD's

Sharp LM057, DSTN Passive 320 X 240

Sharp LM8V302, DSTN Passive 640 X 480

Hantronix 6448C(S), DSTN Passive 640 X 480

Other manufacturers include Hitachi and NEC

#### TIDAL TOUCH CONTROLLER SPECIFICATIONS

Size	2.80" X 2.40"
Processor	Microchip 16F873
Clock freq.	20.0 MHz
Touch Panel	4 wire resistive, 300 to 600 ohms typical
Resolution	10 bit
Input Power	3.3 to 5VDC and 12.0 Volts DC
	Supplied by Single Board Computer
RS-232	19200 Baud, N81
VLCD	20 to 30 VDC programmable 75 mA.
LCD interface	8 and 16 bit
Digital I/O	(1) switch input,
	(2) tri-color LED outputs

#### Technical Manual

A complete technical manual includes:

- ♦ Complete specifications.
- Functional descriptions.
- Operating instructions.
- Programming instructions including examples.
- Test and troubleshooting information.

#### Price List (prices effective until September 00)

Model	Description	EA.
TT-5VL	Tidal Touch controller for 5 V LCD	\$89
TT-3.3VL	Tidal Touch controller for 3.3 V LCD	\$109

#### Other Products From Tidal Engineering:

#### Tidal ET3 Platform.

Standard platform for embedded software training from the Entelechy-Tidal Training Technology (ET3) Strategic Alliance.

#### ◆ The MT488A.

Control any GPIB instrument or automatic test equipment with hand held IEEE 488 test controller unit.

# The SBC488 Single Board Computers Complete solution for rapid development of test instruments incorporating GPIB and RS-232 interfaces.

#### ◆ The MT488A-RC Remote Controls Infrared remote control any GPIB instrument or add remote I/O for remote user input, emergency shut down, test pause/reset, etc.

#### The Tidal Touch Controller is a product of:

#### **Tidal Engineering Corporation**

Tidal Engineering was founded in 1994. Tidal Engineering designs and builds embedded hardware and software for test and measurement and data acquisition applications. Tidal products are used by major corporations in several areas and have been recognized by industry. Tidal also does contract engineering.



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## The Tidal Touch Controller is available exclusively from: ADI American Distributors Inc.

ADI is an ISO-9002 certified distributor of Electronic and Electro-Mechanical components and assemblies. Founded in 1983, ADI serves domestic and international customers in both commercial and military markets. ADI has introduced several high technology solutions in joint venture with Tidal Engineering.



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