AccuTouch 2218 Combo (Dual Serial/USB) Controller

The 2218 controller is RoHS Compliant, part # E329179.

Supply Voltage and Current

- +5 VDC, nominal (+4.50 VDC to +5.25 VDC). Self powered only.
- 25 mA standby minimum, typical at +5 VDC; during touch 110 mA typical
- Average power dissipation is 0.56 W, typical

Interface-Serial

- EIA 232E (Serial RS-232), DCE configuration. 8 Data Bits, 1 Stop Bit, No Parity, Full Duplex
- Hardware handshaking: RTS/CTS
- DSR is pulled HIGH (>+3V) by the 2218 when connected and powered. DTR can be asserted by the host to interrupt the flow of data from the controller.
- Note that if the application does not monitor CTS, then an interval of approximately 5 seconds should be inserted between the issuance of a reset command and any other command.

Communication Parameters

- Baud Rate 9600 (default), and 19200
- 8 Data bits, 1 stop bit, no parity only

Interface-USB

- The 2218 is a full-speed USB device. If the USB is connected to the controller, the controller will communicate over the USB, and will not communicate over the serial port.
- The 2218 is never powered from the USB – it is self-powered only.

Operating Modes

- Full AccuTouch SmartSet protocol. Emulation of E281A-4002 protocol can be selected by SmartSet command.
- Initial/ Stream/ Untouch/ Z-axis Enable Modes

Touch Resolution - 4096x4096, size independent

Conversion Time - Approximately 5.5 ms per coordinate set

AccuTouch 2216 Combo (Dual Serial/USB) Controller

The 2216 controller is RoHS Compliant, part # E658721.

Supply Voltage and Current

- +5 VDC, nominal (+4.50 VDC to +5.25 VDC). Self powered only.
- 50 mA standby, typical at +5 VDC; during touch 160 mA average, 240 mA peak
- Average power dissipation is 0.5 W, typical
- Supply must be capable of sourcing 400 mA, minimum
- Total noise and ripple requirement must be less than 100mV (p-p) for frequencies below 1MHz, and less than 50mV (p-p) for frequencies above 1MHz.

Interface-Serial

- EIA 232E (Serial RS-232), DCE configuration. 8 Data Bits, 1 Stop Bit, No Parity, Full Duplex
- Hardware handshaking: RTS/CTS
- DSR is pulled HIGH (>+3V) by the 2216 when connected and powered. DTR can be asserted by the host to interrupt the flow of data from the controller.
- Note that if the application does not monitor CTS, then an interval of approximately 5 seconds should be inserted between the issuance of a reset command and any other command.

Communication Parameters

- Baud Rate 9600 (default), and 19200
- 8 Data bits, 1 stop bit, no parity only

Interface-USB

- The 2216 is a full-speed USB device. If the USB is connected to the controller, the controller will communicate over the USB, and will not communicate over the serial port.
- The 2216 is never powered from the USB – it is self-powered only.

Operating Modes

- Full AccuTouch SmartSet protocol. Emulation of E281A-4002 protocol can be selected by SmartSet command.
- Initial/ Stream/ Untouch/ Z-axis Enable Modes

Touch Resolution - 4096x4096, size independent

Conversion Time - Approximately 10 ms per coordinate set

Temperature

- Operating: 0°C to 65°C
- Storage: -40°C to 85°C

Humidity

- Operating: 10% to 90% RH, noncondensing
- Storage: 10% to 90% RH, noncondensing

Operating Altitude

- 10,000 feet

Shock and Vibration

- Three axis sine wave, 50Hz to 2kHz, 1G, 2 minutes/Octave with dwell on resonances

ESD

- Per EN 6100-4-2 1995: Level 4. Contact discharge 8kV, air discharge 15kV.

Flammability

- The printed circuit board substrate is rated 94V0. All plastic components, such as headers and connectors, are also rated 94V0.

Construction

- Four-layer surface-mount design with internal ground plane for EMI suppression

Dimensions

- Total width: 1.38 inches (35.00 mm)
- Total length: 2.36 inches (60.00 mm)
- Total height: 0.45 inches (11.30 mm)
- The mounting holes are plated through for chassis ground connection. Refer to the dimensional drawing under the Drawings tab.

Temperature

- Operating: 0°C to 65°C
- Storage: -25°C to 85°C

Humidity

- Operating: 10% to 90% RH, noncondensing
- Storage: 10% to 90% RH, noncondensing

Operating Altitude

- 10,000 feet

Shock and Vibration

- Three axis sine wave, 50Hz to 2kHz, 1G, 2 minutes/Octave with dwell on resonances

ESD

- Per EN 6100-4-2 1995: Level 4. Contact discharge 8kV, air discharge 15kV.

Flammability

- The printed circuit board substrate is rated 94V0. All plastic components, such as headers and connectors, are also rated 94V0.

Construction

- Four-layer surface-mount design with internal ground plane for EMI suppression

Dimensions

- Total width: 1.378 inches (35.00 mm)
- Total length: 2.362 inches (60.00 mm)
- Total height: 0.404 inches (10.26 mm)
- The mounting holes are plated through for chassis ground connection. Refer to the dimensional drawing under the Drawings tab.

Compatibility of 2218 and 2216

The 2218 is designed to be compatible with 2216 in mechanical, electrical and functional aspects. The board dimensions of the 2218 include mounting holes that are identical to the 2216. The connector types are also identical. The 2218 meets the equivalent electric specifications as the 2216. The inrush current and EM emission spectrum may have changed slightly but they still meet the same specification. The identification control panels of serial and USB, response time, SmartSet protocol command set, power supply input sensitivity and output characteristics all remain equivalent.