DATA SHEET
ZXY100™ CONTROLLERS

The ZXY100™ range of self-capacitance single touch controllers are based around a proprietary Zytronic ASIC (Application Specific Integrated Circuit) and feature a small form factor that can support PCAP sensor from 5" to 86"class for single touch activation and gesture control.

BENEFITS

- Powered via USB comms cable
- Singe touch ideal for basic button on/off applications
- Millisecond fast, low latency touch response
- Adjustable 'palm' rejection firmware settings
- Plug-and-play support for various operating systems
- On-board calibration storage and simple firmware upgrading
- Operates with gloved fingers and on-screen rainwater
- In-built USB and Serial communication modes
- Chipset and reference design guidelines available by agreement for mother board design wishing to incorporate our touch solution

FEATURES

- Supports Zytronic touch sensor sizes 5" to ~86"
- Controller powered direct from USB VBUS 5V D.C. (tolerance 4.75V to 5.25V)
- Power consumption:
  ZXY100-U-OFF-32-A <100mA
  ZXY100-U-OFF-64-A <100mA
  ZXY100-U-OFF-128-A <100mA
- Touch point reporting rate ~1ms at touch controller output, 8ms to 12ms at host over USB
- Accuracy down to <1mm of touched position
- Will detect single touch through up to 20mm glass
- Touch sensor flexible tails available in 202mm and 80mm lengths

OPERATING SYSTEMS AND SOFTWARE SUPPORT TOOLS

- Fully HID compliant "plug-and-play" under Windows, Linux
- Controller output protocol available on request for custom interface applications

- Auto setup via associated ZyConfig™ tools for easy and optimum production line, or on-site configuration
- Custom calibration options available via ZyConfig™ tool to allow configurable touch active areas on the sensor

ENVIRONMENT

Operating temperature	-35°C to +70°C
Humidity	RH 0-90% up to 40°C
Storage temperature	-40°C to 80°C
Storage humidity	RH 0-90% up to 40°C
Resistance to contamination	Sensing media protected by glass, exceeds requirements of ASTM-F1598-96
Water resistance	Unaffected by water droplets or condensation

APPROVALS

- RoHS Compliant
- CE EN55032 Class B and EN55035
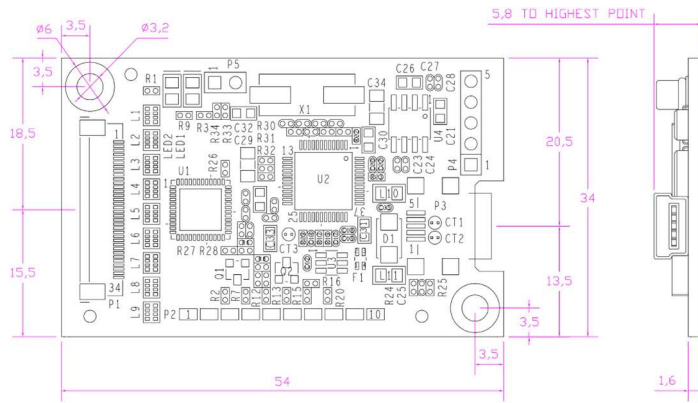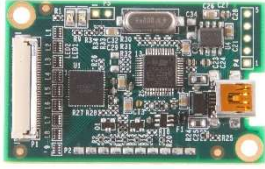- FCC Class B
- UL approved

CONTROLLER DRAWINGS

(USB configuration illustrated)
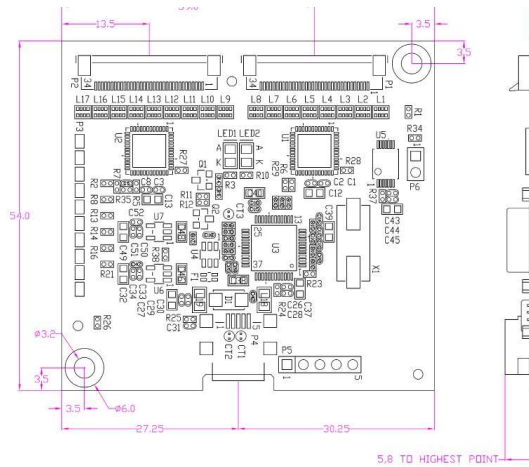
ZXY100-U-OFF-32

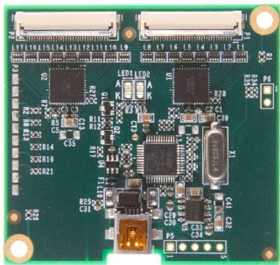(32 sensor electrode inputs)

FOR ZYB™ SENSORS UP TO ~19"

ZXY100-U-OFF-64

(64 sensor electrode inputs)
FOR ZYB™ SENSORS UP TO ~46"

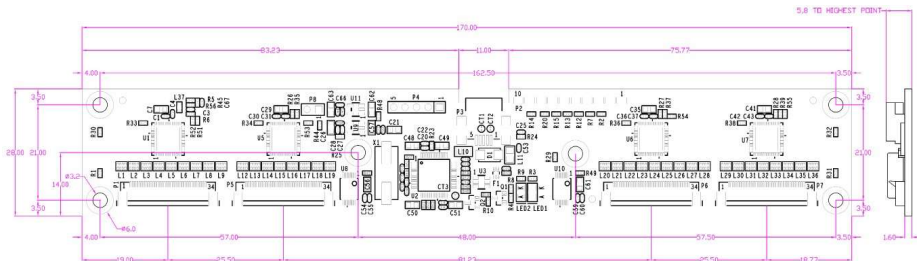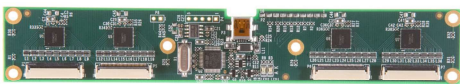## ZXY100-U-OFF-128

(128 sensor electrode inputs)
FOR ZYB™ SENSORS >46"

CHIPSETS AVAILABLE FOR ALL ZXY100™ CONTROLLER SIZES