

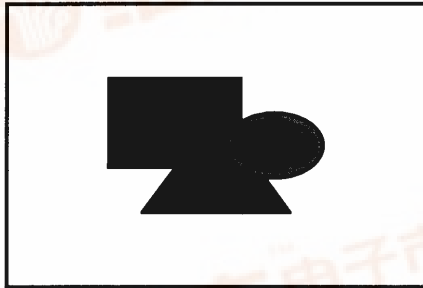
## Quantum

### QT60040 Series Matrix IC

Part No.	Temp	Pkg	Output	Pwr	T&R
QT60040-D	0~70&deg;C	DIP14	H	+5V	N
QT60040-IS	-40~85&deg;C	SO14	H	+5V	Y
QT60040-S	0~70&deg;C	SO14	H	+5V	Y

Applications:

4-Key Thru-Panel Touch Sensing, Touch Controls



QT60040 4-key touch matrix IC.

Projects 'touch-key' sense fields through any non-conductive panel (plastic, glass, ceramic, stone...) up to 0.25" thick (6.35 mm) to create a keypanel with no moving parts. The QT60040 IC is fully self-calibrating and can deal with virtually any nonconductive panel material. individual key sizes can even be varied within a panel to create a wide mix of large and small keys of various shapes.

The QT60040 is the latest addition to a series of key matrix panel controller IC's using QProx™ technology. See the [QT60320](#) for 32-key applications. Evaluate the QT60040 with the [E604 Board](#).

Implement multi-key touch screens for a fraction of the cost of resistive elements. Eliminate holes in front panels; eliminate all mechanical keys, switches, knobs. Make the exterior of your product into an 'intrinsic' multi-key touch surface

Replace virtually any membrane switch, anywhere. Implement multi-key touchscreens for a fraction of the cost of resistive elements. Eliminate holes in front panels; eliminate all mechanical keys, switches, knobs. Make the exterior of your product into an 'intrinsic' multi-key touch surface

Applications

#### ■ Appliance Controls

#### ■ High Security/vandal resistant locations

- Outdoor/weatherproof keypads
- Kiosks (thru-glass interactive controls)
- Technical Instruments (instrument control panels)
- LCD overlay touch screens
- Machine tool controls
- Computer Peripherals touch controls (printers, scanners, etc.)
- Replace virtually any membrane switch, anywhere.

#### QT60040 Features

- Burst Mode QT matrix sensor
- Allows up to 2 keys to be contacted at any one time
- Variable recalibration timeout settings
- True digital autocal on every key - no potentiometers anywhere
- True matrix sensing: 1 x 4 lines required for 4 keys
- Digital signal filtering built-in
- Complete key-by-key drift compensation
- Complete key-by-key 'stuck key' timeout - recalibrates each key when timed out
- Usable with Indium-Tin-Oxide ("ITO") for see-through, back-illuminated touch panels
- SMT (SO14) package.