

MAIN DISPLAY

Mobile Touch

maXTouch® Touchscreen Controllers

Precision in Every Touch



Smartphone



Wearable & Gaming



Tablet/Notebook

- 6th generation platform leveraging >10 years expertise
- Best-in class power consumption
- Advanced algorithms
- Proven solution for high capacitive loading
- Total solution approach with innovative sensor design
- Enabling ultra thin displays and new foldable design concepts



Solomon Systech's maXTouch® capacitive touchscreen controllers put the industry's leading capacitive touchscreen technology in the hands of mobile device engineers. These revolutionary controllers enable mobile OEMs to implement the superior touchscreen experience that consumers demand.

The maXTouch® architecture combines the best of mutual- and self-capacitance to ensure optimal touch performance with the highest noise immunity and lowest power consumption. This unique touchscreen controller technology, with its intelligent touch processing algorithms, unparalleled noise suppression, high responsiveness and pinpoint precision, helps you create what you have always imagined.

Applications: Smartphones, Phablets, Tablets, Ultrabooks, Notebooks, All-In-One PCs, Digital Still Cameras, e-Readers, GPS Systems, Portable Media Players



Water/ Moisture



Foldable Screen



Side Keys



Glove Touch



Force Keys



Shaped Sensors



Proximity Detection



Handedness Detection



Active Stylus



Finger Hover



Features

- Capable of **2-finger tracking** in moisture
- **Side Keys** for confident control replacing side buttons for a buttonless world
- **Force Keys** to replace menu; home; back buttons
- **Shaped Sensors** enabling full screen displays
- **Proximity Detection** up to 15mm for in-screen detection of larger objects
- **Handedness Detection** combined with Side Keys for true one handed UI & ease of use
- **Finger Hover** tracking up to 30mm



**SOLOMON
SYSTECH**

solutions in silicon

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Features

Superior Noise Immunity

- Advanced Analog Front End (AFE) system combining integrated charge pump for high-voltage transmission lines and advanced frequency hopping intelligence to enable unparalleled signal clarity.
- Allows the touchscreen system to perform consistently and reliably under a variety of noisy conditions, such as with low-quality chargers and ambient signal interferences.

Shorter Design Cycle

- Shipped pre-loaded with touch firmware to avoid expensive and time-consuming step of programming the firmware during mass production.
- A small, simple configuration file for easy loading during the device's startup process.

Selection Guide - Smartphone | Wearables by increasing channel count

Part Number	Channel Count	Finger Hover Proximity Detection	Water/Moisture	Glove Touch	HV Mutual (wrt AVDD)	HV Self (wrt AVDD)	Cap Buttons	Package	Extended Features
mXT874U	38X / 23Y	30mm	1-finger	5mm	5x	5x	10-ch PTC	CCU 6 x 6 x 0.6 BGA-115	Hover
mXT748U2/F	34X / 22Y 36X / 20Y 38X / 18Y	15mm	2-finger	5mm	3x	3x	3-Gkeys	6 x 6 x 0.6 BGA-102 6 x 6 x 0.45 BGA-102	High Load Enhanced Display & External Noise immunity Thinnest / Foldable covers (F Vers)
mXT680U2	34X / 20Y	15mm	2-finger	5mm	3x	1x	-	CCU 6 x 6 x 0.6 BGA-88 C4U 6 x 6 x 0.45 BGA-88 C5U 5 x 5 x 0.6 BGA-84	Side Keys Shaped Sensor Proximity Detection Gkeys (except C5U package) Force Keys (except C5U package)
mXT640U	32X / 20Y	15mm	2-finger	5mm	3x	1x	-	CCU 6 x 6 x 0.6 BGA-88 C4U 6 x 6 x 0.45 BGA-88 C5U 5 x 5 x 0.6 BGA-84	Side Keys Proximity Detection
mXT480U2	30X / 16Y	N / A	2-finger	5mm	2x	1x	-	6x6 QFN-60	Proximity Detection
mXT144U	12X / 12Y	N / A	1-finger	3mm	1x	1x	X / Y-ch	4 x 4 x 0.4 QFN-38 2.6 x 2.5 WLCSP36	Force Capacitance, 4-channel

Solomon Systech Limited

Solomon Systech Limited is a leading semiconductor company providing display IC products and system solutions that enable a wide range of display and touch applications for smartphones, tablets, TVs/monitors, notebooks and other smart devices, including wearables, healthcare devices, smart home devices, as well as industrial appliances, etc. Solomon Systech (International) Limited's shares have been listed on the main board of the Stock Exchange of Hong Kong Limited since April 8th, 2004 (stock code: 2878). More information about the Group, its products and services may be obtained at <http://www.solomon-systech.com/>.



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