1. Single Touch Key

Devices	Description
AT42QT1010	The AT42QT1010 is part of Atmel's family of SingleTouch touch button controllers. The AT42QT1010 supports a single capacitive touch button and can be used to replace a traditional mechanical switch in many designs. The device can be configured to work through a range of panel thicknesses and materials through careful capacitor selection. The device can also be used in proximity sensing applications. The AT42QT1010 requires just 3 external components. The AT42QT1010 has a 'Max On' setting which prevents the 'Stuck-key' condition from occurring when an obstruction is detected for prolonged period of time. After the time period the key will re-calibrate, allowing subsequent touches to be detected. The EVK1010A evaluation kit can be used to appraise the performance of the AT42QT1010. ORDERING CODE: AT42QT1010
AT42QT1011	The AT42QT1011 is part of Atmel's family of SingleTouch touch button controllers. The AT42QT1011 supports a single capacitive touch button and can be used to replace a traditional mechanical switch in many designs. The device can be configured to work through a range of panel thicknesses and materials through careful capacitor selection. The device can also be used in proximity sensing applications. The AT42QT1011 requires just 3 external components. The AT42QT1011 will remain on, as long as a touch is detected. This is useful for applications such as hearing aids, which must remain on as long as the hearing aid is placed in the ear. ORDERING CODE: AT42QT1011
AT42QT1012	The AT42QT1012 is part of Atmel's family of SingleTouch touch button controllers. The AT42QT1012 supports a single capacitive touch button and can be used to replace a traditional mechanical switch in many designs. The AT42QT1012 supports touch-on/touch-off or toggle operation which means the device is ideal for use as a power button replacement. The device can be configured to work through a range of panel thicknesses and materials through careful capacitor selection. The AT42QT1012 also includes a programmable auto-off delay which a designer can use to turn the device off after any time period. It is also possible to use the AT42QT1012 in proximity sensing applications. The EVK1012A evaluation kit can be used to appraise the performance of the AT42QT1012 device. ORDERING CODE: AT42QT1012

2. Buttons ≤ 10

Devices	Description
AT42QT1040	The AT42QT1040 is a low cost touch sensor IC with per channel touch indication based on Atmel's QTouch® technology. It comes in a miniature 3 mm x 3 mm 20-pin VQFN package making it ideal for space constrained mobile devices. The sensor chip has very low power consumption so capacitive sensing can be added to a design with minimal impact on battery lifetime. Key sensitivity can be set to support a wide range of panel thicknesses, materials and shapes. The IC can also be configured with one channel as a proximity sensor, which could be used to illuminate "hidden-until-lit" keys before a device is picked up. Atmel's patented Adjacent Key Suppression® (AKS®) technology is used in the device to ensure that even with tightly packed keypads only the intended key is activated by the touch of a finger. To aid product development the AT42QT1040 has a debug mode in which internal data from the chip can be accessed and monitored. This means that designs can quickly be evaluated and tuned resulting in shorter product design times.
AT42QT1060	The QT1060 IC provides all of the functions needed to create a fully functional touch interface for a mobile phone or other handheld device. The QT1060 is a touch sensor IC designed to make the development of mobile and other applications as fast and simple as possible. It is based on Atmel's QTouch® technology and provides all of the signal processing and input/output functions required in a tiny 28-pin, 4 mm x 4 mm RoHS compliant package. QT1060 includes a guard channel to prevent false detections by other keys, and features LEDs directly powered by the IC, eliminating the need for an external LED controller.

3. Buttons > 10

Devices	Description
AT42QT1110	AT42QT1110 is standarized 11-key capacitive touch controller. With its configurable 11-key QTouch buttons with guard channels for reliable capacitive UIs, the AT42QT1110 can be used in all kinds of applications where buttons are required. Automotive Version: AT42QT1110 Automotive
AT42QT2160	The QT2160 implements 16 touch channels and a slider (using 2 to 8 channels) as well as LED control, IO expansion and a 2-wire serial interface, compatible to the industry standard I2C bus. The IC is ideal for use as a small control panel processor in battery driven consumer devices such as mobile phones, personal media players, PDAs, digital picture frames and other mobile appliances. It is based on Atmel's QMatrix™ and QSlide® technologies, has very low power requirements and provides a very wide range of host programmable input/output configurations.

QT60160	These devices are designed for low cost mobile and consumer electronics applications. QMatrix™ technology employs transverse charge-transfer sensing electrode designs which can be made very compact and are easily wired. Charge is forced from an emitting electrode into the overlying panel dielectric, and then collected on a receiver electrode which directs the charge into a sampling capacitor which is then converted directly to digital form without the use of amplifiers.
QT60168	QT60000 family QMatrix™ QT chips sense 'glass-touch' on up to 48 keys, using passive electrodes patterned on any PCB.
QT60240	These devices are designed for low cost mobile and consumer electronics applications. QMatrix™ technology employs transverse charge-transfer sensing electrode designs which can be made very compact and are easily wired. Charge is forced from an emitting electrode into the overlying panel dielectric, and then collected on a receiver electrode which directs the charge into a sampling capacitor which is then converted directly to digital form without the use of amplifiers.
QT60248	QT60000 family QMatrix™ QT chips sense 'glass-touch' on up to 48 keys, using passive electrodes patterned on any PCB.
QT60326	QT60000 family QMatrix™ QT chips sense 'glass-touch' on up to 48 keys, using passive electrodes patterned on any PCB.
QT60486	QT60000 family QMatrix™ QT chips sense 'glass-touch' on up to 48 keys, using passive electrodes patterned on any PCB.

4. Wheels & Sliders

Devices	Description
AT42QT2160	The QT2160 implements 16 touch channels and a slider (using 2 to 8 channels) as well as LED control, IO expansion and a 2-wire serial interface, compatible to the industry standard I2C bus. The IC is ideal for use as a small control panel processor in battery driven consumer devices such as mobile phones, personal media players, PDAs, digital picture frames and other mobile appliances. It is based on Atmel's QMatrix™ and QSlide® technologies, has very low power requirements and provides a very wide range of host programmable input/output configurations.

5. Automotive Qualified

Devices	Description
AT42QT1110 Automotive	AT42QT1110 is standarized fully automotive qualified 11-key capacitive touch controller designed to meet all the requirements for devices in automotive industry. With its configurable 11-key QTouch buttons with guard channels for reliable capacitive UIs, the AT42QT1110 can be used in all kinds of automotive applications where buttons are required, e.g. radio, keyless entry, electric windows and satellite navigation. Industrial Version: AT42QT1110