

OMRON

Touch Sensors



B6TS

Features:

The B6TS has successfully integrated the various functions required for a capacitance touch sensor including sensitivity setting, noise processing and compensation into just one IC combined with a few peripheral components. In addition, we supply a tool called the Workbench to make full use of the IC by providing total support for all work required in designing - electrode design, sensitivity adjustment, threshold setting, mode selection and signal monitoring.

B6TW

Features:

The B6TW is a tool for using the B6TS series touch sensor IC, and includes PC software and an interface board. Use of Workbench allows easy execution of the operations required in design - electrode design, sensitivity adjustment, threshold setting, mode selection and signal monitoring and makes it easy for users to incorporate highly reliable touch sensors into devices. Workbench can be used not only for product design, but also for prior verification of functions.

Functions:

- Runs on Windows PCs (Windows XP and 2000 recommended)
- Connects with a PC via serial communication
- Comes with an evaluation board for four or eight channels for immediate evaluation

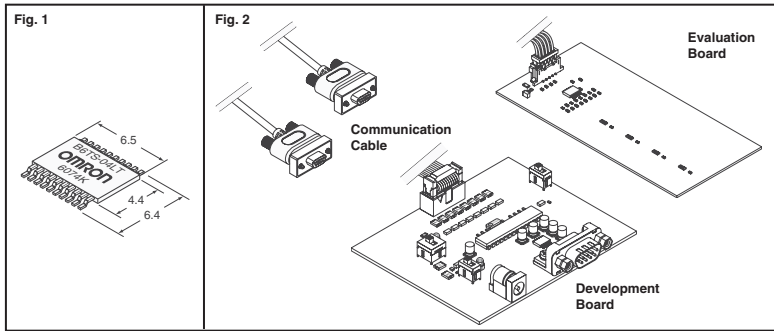


Fig.	Description	Digi-Key Part No.	Cut Tape Price Each			Digi-Key Part No.	Tape and Reel		Omron Part No.
			1	25	50		Qty.	Pricing	
1	4 Channel, Touch Sensor IC, 20 pin SOP.....	Z2564CT-ND	4.53	4.08	3.62	Z2564TR-ND	2,500	2262.50/M	B6TS-04LT
2	Development Kit, 4 Channel, Includes Software and Cable.....	Z2566-ND	935.00/1			—	—	—	B6TW-S04LT

QUANTUM RESEARCH GROUP Sensors



QProx™/QTouch™ Charge-Transfer ("QT") General Description: These are self-contained digital capacitance ICs capable of detecting proximity, touch, and fluid level. With appropriate electrodes they can sense through sealed surfaces made of glass, plastic, stone, ceramic, and wood, up to thicknesses of several inches. This capability coupled with an ability to

continuously calibrate leads to new product concepts. They are designed specifically for control panels in home appliances, PC peripherals, machinery, security systems, lighting controls, or anywhere a mechanical switch or button may be found. Versions also available for fluid sensing.

Description	Supply Voltage (V)		Supply Current (Typical)	Operating Temperature (°C)	Package	Digi-Key Part No.	Price Each			Digi-Key Part No.	Tape and Reel		Quantum Part No.
	Minimum	Maximum					1	50	100		Qty.	Pricing	
QT100 QTouch 6-Pin Sensor IC	2.5	5.5	6.5 - 45µA	-40 - 85	6-WSON	427-1135-1-ND NEW!	1.02	93	.87	427-1135-2-ND NEW!	3,000	705.00/M	QT100A-ISG
QT110 QProx 8-Pin Sensor IC	2.5	5.5	9.5 - 26µA	-40 - 85	8-SOIC	427-1092-1-ND†	4.53	2.63	2.45	427-1092-2-ND†	3,300	2004.00/M	QT110-ISG
QT110 QTouch 8-Pin Sensor IC	2.5	5.5	9.5 - 26µA	-40 - 85	8-SOIC	427-1137-1-ND NEW!	2.90	2.63	2.45	427-1137-2-ND NEW!	3,300	1996.00/M	QT110A-ISG
QT113 QProx 8-Pin Sensor IC	2.5	5.5	600µA	-40 - 85	8-SOIC	427-1096-1-ND†	4.53	2.63	2.45	—	—	—	QT113-ISG
QT113 QProx 8-Pin Sensor IC	2.5	5.5	600µA	-40 - 85	8-SOIC	427-1138-1-ND NEW!	2.90	2.63	2.45	427-1138-2-ND NEW!	3,300	1996.00/M	QT113A-ISG
QT115 QProx 8-Pin Sensor IC	2.5	5.25	20µA	-40 - 85	8-SOIC	427-1122-1-ND	5.31	3.08	2.87	427-1122-2-ND	3,300	2352.00/M	QT115-ISG
QT117 QProx 8-Pin Sensor IC	2.5	5.5	600µA	-40 - 85	8-SOIC	427-1097-1-ND	8.36	4.85	4.52	—	—	—	QT117L-ISG
QT118 QProx 8-Pin Sensor IC	2.5	5.0	8 - 30µA	-40 - 85	8-SOIC	427-1139-1-ND NEW!	2.90	2.63	2.45	427-1139-2-ND NEW!	3,300	1996.00/M	QT118HA-ISG
QT140 QProx 4-Key Sensor IC	3.0	5.0	5.0mA	-40 - 105	28-SSOP	427-1111-1-ND	8.24	7.48	6.62	427-1111-2-ND	2,100	5679.10/M	QT140-ASG
QT160 QProx 6-Key Sensor IC	3.0	5.5	5.0mA	-40 - 85	28-SSOP	427-1101-1-ND	7.33	6.65	5.89	—	—	—	QT160-ISG
QT161 QTouch 6-Key Sensor IC	3.0	5.5	2.5mA	-40 - 105	28-SSOP	427-1112-1-ND	10.53	9.50	8.54	—	—	—	QT161-ASG
QT2160A QSlide™ 16-Key QMatrix™ Sensor IC	0.5	6.0	476 - 1127µA	-40 - 85	28-MLF	427-1140-1-ND NEW!	2.59	2.35	2.19	427-1140-2-ND NEW!	6,000	1782.20/M	AT420T2160-MMU
QT220 QTouch 2-Key Sensor IC	3.9	5.5	1.5mA	-40 - 85	20-SSOP	427-1114-1-ND	3.09	2.80	2.48	427-1114-2-ND	2,000	2160.00/M	QT220-SS-G
QT240 QTouch 4-Key Sensor IC	3.9	5.0	1.5mA	-40 - 85	20-SSOP	427-1102-1-ND	3.46	3.15	2.81	427-1102-2-ND	2,000	2400.00/M	QT240-SS-G
QT320 QTouch 2-Key Sensor IC	1.8	5.0	600µA	-40 - 85	8-SOIC	427-1121-1-ND	5.58	3.26	3.04	427-1121-2-ND	2,000	2485.00/M	QT320-ISG
QT401 QSlideTouch Slider IC	2.5	5.5	110 - 180µA	-40 - 85	14-SOIC	427-1103-1-ND	5.92	5.39	4.81	—	—	—	QT401-ISG
QT401 QSlide Touch Slider IC	2.5	5.5	110 - 180µA	-40 - 85	14-TSSOP	427-1104-1-ND	5.94	5.39	4.78	427-1104-2-ND	2,500	4096.00/M	QT401-SSG
QT411 QSlide Touch Slider IC	2.5	5.5	110 - 180µA	-40 - 85	14-TSSOP	427-1116-1-ND†	3.74	3.40	3.01	—	—	—	QT411-SSG
QT510 QWheel™ Touch Slider IC	2.5	5.5	110 - 180µA	-40 - 85	14-SOIC	427-1105-1-ND	7.85	7.16	6.37	—	—	—	QT510-ISG
QT510 QWheel Touch Slider IC	2.5	5.5	110 - 180µA	-40 - 85	14-TSSOP	427-1106-1-ND	7.89	7.16	6.34	427-1106-2-ND	2,500	5440.00/M	QT510-SSG
QT511 QWheel Touch Slider IC	2.5	5.5	110 - 180µA	-40 - 85	14-TSSOP	427-1117-1-ND†	6.20	5.62	4.98	427-1117-2-ND†	2,500	4275.00/M	QT511-SSG
QT1080 QTouch 8-Key Sensor IC	2.8	5.0	1.3 - 4.5mA	-40 - 85	32-QFN	427-1090-1-ND	3.59	3.26	2.89	427-1090-2-ND	2,500	2474.00/M	QT1080-ISG
QT1081 QTouch 8-Key Sensor IC	2.8	5.0	1.6mA	-40 - 85	32-QFN	427-1127-1-ND	4.00	2.39	2.25	427-1127-2-ND	2,500	1774.00/M	QT1081-ISG
QT1100 QTouch 10-Key Sensor IC	3.3	5.0	1.4 - 2.9mA	-40 - 85	48-SSOP	427-1093-1-ND	10.35	6.01	5.60	1,000	4577.00	—	QT1100A-ISG
QT1100 QTouch 10-Key Sensor IC	2.8	5.0	1.5 - 4.5mA	-40 - 85	32-QFN	427-1094-1-ND	6.46	3.75	3.49	427-1094-2-ND	2,500	2853.00/M	QT1101-ISG
QT1103 QTouch 10-Key Sensor IC	2.8	5.0	1.4mA	-40 - 85	32-QFN	427-1129-1-ND	2.82	2.56	2.27	427-1129-2-ND	2,500	1877.00/M	QT1103-ISG
QT1106 QTouch 7-Key Sensor IC	2.8	5.0	1.3mA	-40 - 85	32-QFN	427-1115-1-ND	6.03	3.52	3.28	—	—	—	QT1106-ISG
QT60160 QMatrix16-Key Touch IC	1.8	5.25	1.02mA	-40 - 85	32-MLF	427-1125-1-ND	4.54	2.76	2.60	427-1125-2-ND	3,000	2075.00/M	QT60160-ISG
QT60168 QProx 16-Key QMatrix IC	3.0	5.25	10mA	-40 - 105	32-TQFP	427-1107-ND	7.01	6.31	5.68	—	—	—	QT60168-ASG
QT60240 QMatrix 24-Key Touch IC	1.8	5.25	1.02mA	-40 - 85	32-MLF	427-1126-1-ND	4.90	2.94	2.85	427-1126-2-ND	3,000	2272.00/M	QT60240-ISG
QT60248 QProx 24-Key QMatrix IC	3.0	5.25	10mA	-40 - 105	32-TQFP	427-1108-ND	8.80	7.94	7.15	—	—	—	QT60248-ASG
QT60326 QProx 32-Key QMatrix IC	4.75	5.25	15mA	-40 - 105	44-TQFP	427-1109-ND	11.00	9.92	9.36	—	—	—	QT60326-ASG
QT60486 QProx 48-Key QMatrix IC	4.75	5.25	15mA	-40 - 105	44-TQFP	427-1110-ND	13.19	11.90	11.22	—	—	—	QT60486-ASG

† Not recommended for new design

Evaluation Boards



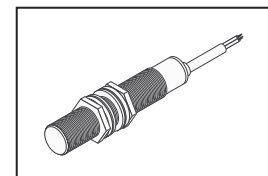
Description	Digi-Key Part No.	Price Each	Quantum Part No.
E3A Evaluation Board for QT300	427-1069-ND	89.00	E3A
E100S Evaluation Board for QT100.....	427-1128-ND	16.73	E100S
E102 Evaluation Kit for QT102-ISG QTouch™ 3-Key Sensor IC ...	427-1133-ND	34.09	E102 KIT
E240B Evaluation Board for QT240.....	427-1113-ND	27.80	E240B

Description	Digi-Key Part No.	Price Each	Quantum Part No.
E1081 Evaluation Board for QT1081-ISG 8-Key Sensor IC.....	427-1130-ND	90.61	E1081 KIT
E1103 Evaluation Board for QT1103-ISG.....	427-1134-ND	55.92	E1103
E1106 Evaluation Board for QT1106 IC	427-1124-ND	202.80	E1106 KIT
E6248 Evaluation Board for QT60248 24-Key QMatrix™ IC	427-1087-ND	264.29	E6248
E6486 Evaluation Board for QT60486 48-Key QMatrix IC	427-1088-ND	271.43	E6486
E6240 Evaluation Board for QT60160/QT60240 IC	427-1123-ND	135.71	E6240 KIT
EVK2160A Evaluation Board for QT2160	427-1141-ND NEW!	109.99	EVK2160A

Honeywell Sensing and Control

Ultrasonic Sensors

The 943 Series industrial sensors add to our product range of sensors. They have improved scanning ranges, remote teach in of the switching or analog outputs, as well as new advanced features, such as window and hysteresis modes.



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Description	Switching Frequency	Output	Digi-Key Part No.	Price Each			Honeywell Part No.
				1	25	50	
943 Series, Software Programmable, 200 - 2000mm scan distance, M18 Plastic Housing	1.2Hz	NPN, 2 NO/NC	480-3007-ND	260.44	215.68	207.54	943-F4Y-2D-002-180E
	250ms	0 - 10V	480-3008-ND	260.44	215.68	207.54	943-F4Y-2D-1C0-180E

Digi-Reel® Most SMT cutdown parts are available on a Digi-Reel®. For Digi-Reel part number, change 1-ND to 6-ND or CT-ND to DKR-ND. See Digi-Key® Services on page 2 for additional information.

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