

# 3M MicroTouch™ Capacitive Touch Screens and Accessories



## ClearTek™ II Capacitive Touch Screens

### Features:

- Excellent light transmission of 91.5% (±1.5%) provides vibrant optical characteristics with optimal anti-glare properties
- Resilient top coat provides smooth, easy glide surface while offering durable scratch resistance
- Performance unaffected by everyday contaminants in the environment

**Note:** For detailed specifications, please see our website.

Size (Inch)	Flex Tail Length (Inch)	Digi-Key Part No.	Price Each			3M Part No.
			1	10	50	
6.71	4	3M5519-ND	71.58	61.06	56.01	17-8091-203
	8	3M5747-ND	71.58	61.06	56.01	
8.75	4	3M5520-ND	74.05	63.17	57.94	17-8921-203
	8	3M5521-ND	75.29	64.22	58.91	
10.83	4	3M5744-ND	75.29	64.22	58.91	17-8021-205
	8	3M5522-ND	91.33	77.90	71.46	
12.31	4	3M5522-ND	91.33	77.90	71.46	17-8581-203
	8	3M5754-ND	91.33	77.90	71.46	
15.68	4	3M5523-ND	122.19	104.22	95.60	17-8031-203
	8	3M5745-ND	122.19	104.22	95.60	
17.54	4	3M5524-ND	126.61	110.79	102.88	17-8421-203
	8	3M5748-ND	134.53	114.75	105.25	
19.75	4	3M5525-ND	133.58	116.89	108.54	17-8511-203
	8	3M5752-ND	141.93	121.07	111.05	
20.65	4	3M5526-ND	139.39	121.97	113.26	17-8441-203
	8	3M5750-ND	148.10	126.33	115.87	
31.80	8	3M5527-ND	630.75	551.91	512.49	17-8951-205

## Controllers

Interface	Sensor Support	Digi-Key Part No.	Price Each			3M Part No.
			1	10	50	
<b>EX II Capacitive Controllers</b>						
USB	ClearTek II	3M5539-ND	56.77	48.43	44.42	EXII-7710UC
		3M9138-ND	56.77	48.43	44.42	EXII-7760UC
USB 1x2	ClearTek II	3M9137-ND	56.77	48.43	44.42	EXII-7769UC
Serial	ClearTek II	3M5540-ND	56.77	48.43	44.42	EXII-7720SC
<b>MicroTouch SC Resistive Controllers</b>						
USB Serial	4-Wire	3M5541-ND	30.06	27.06	19.54	SC401U
		3M5542-ND	30.06	27.06	19.54	SC402S
USB Serial	5-Wire	3M5543-ND	30.06	27.06	19.54	SC501U
		3M5544-ND	30.06	27.06	19.54	SC502S
USB Serial	8-Wire	3M5545-ND	30.06	27.06	19.54	SC801U
		3M5546-ND	30.06	27.06	19.54	SC802S
<b>MicroTouch SC Series Resistive Chip Set</b>						
—	—	3M5547-ND	14.52	13.07	9.44	SCX-ASIC

## USB and Serial Cables

Description	Digi-Key Part No.	Price Each			3M Part No.
		1	10	50	
<b>SC Series Cables</b>					
USB, 5 pin, 96" (Pearl) .....	3M5548-ND	10.16	9.15	6.61	7319420
Serial, 8 pin, 96" (Teal) .....	3M5549-ND	10.16	9.15	6.61	7319630
<b>EX II Series Cables</b>					
RS-232, 7 pin, 96" (Pearl) .....	3M5551-ND	10.16	9.15	6.61	7310101
USB, 5 pin, 96" (Pearl) .....	3M5552-ND	10.16	9.15	6.61	7312256
USB, 5 pin, 23" (Black) .....	3M5554-ND	10.16	9.15	6.61	7315050
<b>Mounting Tape</b>					
VHB, 3/8 in. x 36 yards .....	3M5550-ND	44.43	37.90	34.77	24736

## ToughTouch II Capacitive Touch Systems (with USB Controllers)

ToughTouch II capacitive touch screens are an ideal solution for ruggedized self-service kiosks and ATM applications – environments where impact strength, shatter resistance, brighter displays, superior surface wear and viewer privacy are a requirement.

Size (Inch)	Flex Tail Length (Inch)	Digi-Key Part No.	Price Each			3M Part No.
			1	10	50	
15.90	8	3M5763-ND	319.66	272.65	250.09	87-4061-211
17.78	8	3M5764-ND	349.28	297.92	273.26	87-5961-211
19.83	8	3M5765-ND	377.67	322.13	295.47	87-6001-211

## ClearTek™ II Capacitive Touch Systems (with USB Controllers)

Size (Inch)	Flex Tail Length (Inch)	Digi-Key Part No.	Price Each			3M Part No.
			1	10	50	
15.68	8	3M9127-ND	178.96	152.65	140.01	17-8031-226
17.54	8	3M9128-ND	191.30	163.17	149.67	17-8421-226
20.65	8	3M9129-ND	204.88	174.75	160.29	17-8441-226
19.75	8	3M9130-ND	198.71	169.49	155.46	17-8511-226
26.28	8	3M9131-ND	378.90	323.18	296.44	17-8931-226

## Wide Aspect Ratio ClearTek™ II Capacitive Touch Systems (with USB Controllers)

Size (Inch)	Flex Tail Length (Inch)	Digi-Key Part No.	Price Each			3M Part No.
			1	10	50	
17.80	8	3M9133-ND	191.30	163.17	149.67	17-9241-226
19.34	8	3M9134-ND	198.71	169.49	155.46	17-9251-226
20.65	8	3M9135-ND	204.88	174.75	160.29	17-9261-226
22.37	8	3M9136-ND	204.88	174.75	160.29	17-9311-226
31.80	8	3M9132-ND	726.94	620.04	568.73	17-8951-226



## Infrared Touch Screens



### E and K Series Infrared Touch Screens:

Infrared technology uses infrared emitter-collector pairs to project an invisible grid of light a small distance over the surface of the screen. When a beam is interrupted, the absence of the signal at the collector is detected and converted to an X/Y touch coordinate.

### Features:

- Super Transparency • High Resolution (Interpolated 4096 x 4096) • Fast response time • Versatile Touch Object • No Drift • Scratch Resistant • Water/Dust Resistant (IP65) • Sunlight Operable • Integrated Controller • Wide Temperature Range (-40°C - 70°C) • Robust Design • Long Life Expectancy

Size (Inch)	Outside Dimensions W x H x D (mm)	Port	Active Area W x H (mm)	Digi-Key Part No.	Price Each				IRTOUCH Systems Part No.
					1	10	50	100	
<b>E Series</b>									
6.4	165.6 x 133 x 8.7	RS-232 USB	130.6 x 98	653-1008-ND	78.41	68.61	58.81	49.01	E-64-C
				653-1009-ND	78.41	68.61	58.81	49.01	E-64-U
6.5	169 x 136 x 9.1	RS-232 USB	134 x 101	653-1010-ND	78.41	68.61	58.81	49.01	E-65-C
				653-1011-ND	78.41	68.61	58.81	49.01	E-65-U
8.4	210.6 x 161.6 x 6.8	RS-232 USB	171.6 x 128.6	653-1012-ND	100.36	87.82	75.28	62.73	E-84-C
				653-1013-ND	100.36	87.82	75.28	62.73	E-84-U
10.4	244.2 x 191.4 x 6.8	RS-232 USB	211.2 x 158.4	653-1014-ND	123.88	108.40	92.92	77.43	E-104-C
				653-1015-ND	123.88	108.40	92.92	77.43	E-104-U
12.1	281.9 x 220.7 x 6.8	RS-232 USB	246.4 x 185.2	653-1000-ND	139.57	122.12	104.68	87.23	E-12-C
				653-1001-ND	139.57	122.12	104.68	87.23	E-12-U
15.1	342 x 266 x 6.8	RS-232 USB	306 x 230	653-1002-ND	161.52	141.33	121.15	100.96	E-15-C
				653-1003-ND	161.52	141.33	121.15	100.96	E-15-U
17	376 x 308 x 6.8	RS-232 USB	340 x 272	653-1004-ND	181.91	159.17	136.43	113.70	E-17-C
				653-1005-ND	181.91	159.17	136.43	113.70	E-17-U
19	414 x 339 x 6.8	RS-232 USB	378 x 303	653-1006-ND	214.84	187.99	161.13	134.28	E-19-C
				653-1007-ND	214.84	187.99	161.13	134.28	E-19-U
<b>K Series - Side Mount</b>									
12	327.2 x 237.2 x 10.3	RS-232 USB	246 x 185	653-1016-ND	161.52	141.33	121.15	100.96	K-12-C
				653-1017-ND	161.52	141.33	121.15	100.96	K-12-U
15	395 x 283.2 x 10.3	RS-232 USB	307 x 231	653-1018-ND	186.61	163.29	139.96	116.64	K-15-C
				653-1019-ND	186.61	163.29	139.96	116.64	K-15-U
17	429.2 x 331.2 x 11.0	RS-232 USB	338.5 x 271	653-1020-ND	208.57	182.50	156.43	130.36	K-17-C
				653-1021-ND	208.57	182.50	156.43	130.36	K-17-U
19	460.2 x 352.1 x 11.0	RS-232 USB	376.1 x 301.1	653-1022-ND	247.77	216.80	185.83	154.86	K-19-C
				653-1023-ND	247.77	216.80	185.83	154.86	K-19-U

**Free shipping on orders over £50! All prices are in British pound sterling and include duties.**

uk.digikey.com — FREEPHONE: 0-800-587-0991 • 0-800-904-7786 — FREEFAX: 0-800-587-0992 • 0-800-904-7783

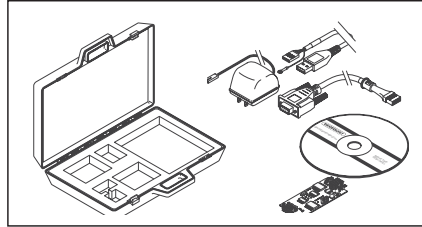
(UK091) 2283

N



## 5-Wire Resistive Touch Screens

The Bergquist 5-Wire Resistive Touch Screens are inherently the most durable resistive touch screens on the market, engineered to withstand high-usage environments. Unlike other resistive technologies that must use two opposing layers to create X- and Y- axis measurements (such as 4-wire and 8-wire technologies), 5-wire sensors utilize a stable glass substrate for both X- and Y- axis measurements. **Features:** • Durability: 35 Million actuations/Drift-free operation at all times • Accuracy: 98.5% accurate - without external electronic correction • Actuation: Any finger, glove or stylus • Optics: Index-matched materials provide 81% light transmission and patented spacer dot design • Warranty: All 5-wire touch screens come with a 5-year warranty



**Touch Screen Starter Kit Contains:** • Touch Screen Controller • RS-232 and USB Cable • Software and Drivers • 110V Power Supply • Documentation and Manuals • Plastic Case • Storage space for touch screen **Note:** Appropriate touch screen must be purchased separately

Size (Inches)	Outside Dimensions (mm)	Active Area (mm)	Digi-Key Part No.	Price Each	Bergquist Part No.	
<b>5-Wire Touch Screens — RoHS Compliant</b>						
3.5	84.04 x 64.5	72.04 x 54.28	BER256-ND	25.88	400333	
5.7	135.0 x 101.0	117.0 x 88.0	BER257-ND	41.64	400413	
6.4	150.0 x 115.5	130.6 x 98.4	BER250-ND	45.01	400395	
7.0	170.1 x 106.3	154.40 x 92.1	BER255-ND	46.14	400397	
8.4	196.09 x 149.86	171.4 x 128.8	BER251-ND	47.26	400399	
10.4	248.92 x 186.69	215.9 x 163.83	BER252-ND	51.76	400401	
12.1	271.27 x 205.74	248.87 x 187.4	BER248-ND	60.77	400403	
12.1	271.27 x 205.74	248.87 x 187.4	BER249-ND	66.39	400404	
15.0	322.0 x 245.5	303.5 x 227.5	BER247-ND	73.14	400384	
17.0	356.0 x 286.5	337.0 x 269.5	BER253-ND	94.53	400387	
19.2	401.0 x 323.40	381.0 x 305.7	BER254-ND	115.91	400392	
<b>Accessories</b>						
Controller Touch Screen USB RS232 .....				BER241-ND	24.68	500499
6' Cable RS-232 for Touch Screen .....				BER242-ND	5.81	400196
6' Cable USB for Touch Screen .....				BER243-ND	5.81	400199
Power Supply for Touch Screen .....				BER244-ND	8.71	400294
<b>Kit — RoHS Compliant</b>						
Starter Kit for Touch Screen .....				BER245-ND	90.75	400293

◆ RoHS Compliant

## TOSHIBA TFT LCD Displays

Leading Innovation >>>



Size (Inches)	Resolution (Pixels)	Outline Dimensions - mm W x H x D	Brightness (cd/m <sup>2</sup> )	Contrast Ratio	Viewing Angle		Power Consumption (Watts)	Operating Temperature (°C)	I/F Signal	Type	Digi-Key Part No.	Price Each		
					Vertical	Horizontal						1	10	100
3.5	320 x 240	90 x 72 x 9	350	350	120	140	0.87	-20 - 70	CMOS	QVGA	LTA035A350F-ND	87.12	81.32	75.51
5.6	1024 x 600	136.8 x 85.9 x 2.95	300	400	50	80	1.40	0 - 50	LVDS	WSVGA	LTD056ET2S-ND	266.81	249.02	231.24
5.7	320 x 240	144 x 104.8 x 9.3	400	500	120	140	1.36	-20 - 70	CMOS	QVGA	LTA057A340F-ND	125.24	116.89	108.54
5.7	320 x 240	144 x 104.6 x 11.5	400	500	120	140	1.36	-20 - 70	CMOS	QVGA	LTA057A343F-ND	148.10	138.23	128.36
5.7	320 x 240	144 x 104.6 x 9.5	320	500	120	140	1.36	-20 - 70	CMOS	QVGA	LTA057A344F-ND	143.75	134.17	124.59
5.7	320 x 240	144 x 104.6 x 7.8	400	500	120	140	1.36	-20 - 70	CMOS	QVGA	LTA057A345F-ND	139.39	130.10	120.81
5.8	400 x 234	145 x 89 x 15.8	350	100	90	110	7.50	-20 - 60	Composite	WQVGA	TFD58W29MW-ND†	217.80	203.28	188.76
5.8	400 x 234	145 x 89 x 15.8	350	350	90	110	7.50	-20 - 60	Composite	WQVGA	TFD58W26MW-ND†	217.80	203.28	188.76
6.5	640 x 480	153 x 121 x 10.9	400	500	120	140	3.70	-20 - 70	LVDS	VGA	LTA065B0D2F-ND§	205.82	192.10	178.38
6.5	640 x 480	153 x 121 x 10.9	550	500	120	140	3.50	-20 - 70	CMOS	VGA	LTA065B0D4F-ND	194.93	181.94	168.95
7.0	800 x 480	170.8 x 110 x 10	280	450	100	120	3.11	-10 - 60	CMOS	WVGA	LTA070A321F-ND‡	170.97	159.58	148.18
7.5	640 x 480	195.2 x 137.5 x 9.5	350	380	120	140	3.40	-20 - 70	CMOS	VGA	LTA075A362F-ND▲	213.44	199.22	184.99
8.4	800 x 600	199.5 x 149.5 x 12	350	300	90	100	6.40	-10 - 60	LVDS	SVGA	LTM08C351R-ND‡	263.54	245.97	228.40
8.4	640 x 480	221 x 152.4 x 12	300	250	95	110	4.0	-10 - 70	CMOS	VGA	LTA084A380F-ND	166.62	155.51	144.41
8.4	800 x 600	199.5 x 149.5 x 12	400	400	100	120	4.8	-20 - 70	LVDS	SVGA	LTA084C271F-ND	254.83	237.84	220.85
8.5	800 x 480	224 x 135 x 14	215	250	100	120	5.50	-10 - 70	CMOS	WVGA	LTA085C184F-ND‡	196.02	182.96	169.89
8.9	1280 x 768	224 x 133 x 5.15	225	140	50	50	2.94	0 - 50	LVDS	WXGA	LTD089EXWS-NDΔ	357.19	333.38	309.57
8.9	1024 x 600	224 x 129 x 5.2	220	100	100	120	3.40	0 - 50	LVDS	WSVGA	LTM09C362T-ND	304.92	284.60	264.27
10.4	640 x 480	238.5 x 177.5 x 12	400	500	120	140	6.30	-10 - 65	CMOS	VGA	LTD104C11R-ND‡	261.36	243.94	226.52

† Composite Video and Analog RGB § With LED Driver ‡ With Touchscreen ▲ 4 Wire Touch Panel ◊ Anti-Reflective Coating Δ Transflective

## SHARP TFT LCD Displays

Normal Display White

Size (Inches)	Pixel Format*	Outline Dimensions - mm W x H x D	Brightness (nits)	Contrast Ratio	Viewing Angle		Total Power Typical (W)	Operating Temperature (°C)	Type	Digi-Key Part No.	Price Each			Sharp Part No.
					Vertical	Horizontal					1	10	100	
3.0	320 x 320	66.6 x 68.5 x 3.6	100	—	40/50	100	0.35	-10 - 60	QVGA	425-2479-ND◆	110.87	93.51	83.49	LQ030B7DD01
3.5	240 x 320	65.0 x 85.0 x 3.4	55	15/85	100/100	100	0.35	-10 - 60	QVGA	425-2481-ND	131.67	111.05	99.15	LQ035Q7DB03
3.6	320 x 240	82.8 x 69.7 x 3.3	300	300	130/130	160	0.43	-10 - 60	QVGA	425-2482-ND◆	103.95	87.67	78.28	LQ036Q1DA01
3.8	240 x 320	69.0 x 88.6 x 3.4	90	8/75	100/100	100	0.52	0 - 50	QVGA	425-2649-ND◆	138.59	116.89	104.37	LQ038Q7DB03R
3.8	320 x 240	117.6 x 69.45 x 13.45	450	100	—	130	3.36	-30 - 85	QVGA	425-2484-ND	228.68	192.87	172.20	LQ038Q5DR01
5.0	320 x 240	119.4 x 89.1 x 12.7	380	—	—	130	4.15	-30 - 85	QVGA	425-2485-ND	256.40	216.24	193.08	LQ050Q5DR01
5.0	960 x 234	126.8 x 89.6 x 16.5	320	60	40/65	130	5.37	-30 - 85	QVGA	425-2486-ND	200.38	177.00	163.65	LQ05AW136
8.0	640 x 480	183.0 x 141.0 x 14.0	380	250	65/55	130	6.20	0 - 55	VGA	425-2489-ND	294.31	259.97	240.35	LQ080B3DG01
8.4	640 x 480	216.0 x 152.4 x 12.0	300	250	55/40	110	5.45	0 - 55	VGA	425-2490-ND◆	325.61	287.63	265.92	LQ084V1DG21
8.4	800 x 600	199.5 x 149.5 x 11.6	350	250	30/65	110	6.02	-10 - 65	SVGA	425-2491-ND◆	331.88	293.16	271.03	LQ084S3DG01
10.4	640 x 480	246.5 x 179.4 x 14.2	350	300	40/70	140	6.76	-10 - 65	VGA	425-2470-ND	313.09	276.57	255.69	LQ104V1DG51
10.4	800 x 600	246.5 x 179.4 x 15.0	350	300	40/70	140	7.80	-10 - 65	SVGA	425-2472-ND	375.71	331.88	306.83	LQ104S1DG21
12.1	800 x 600	276.4 x 209.0 x 11.0	350	300	50/60	140	8.02	-10 - 65	SVGA	425-2473-ND	306.83	271.03	250.58	LQ121S1DG41
12.1	800 x 600	276.0 x 209.0 x 11.0	350	300	50/60	140	8.02	-10 - 65	SVGA	425-2474-ND	306.83	271.03	250.58	LQ121S1LG41
15.0	1024 x 768	331.6 x 254.76 x 12.5	600	350	55/45	120	15.49	0 - 60	XGA	425-2475-ND	369.45	326.35	301.72	LQ150X1LGB1

◆ RoHS Compliant \* 1 Pixel = R+G+B dots † Vertical Viewing Angle 12 o'clock and 6 o'clock

## DIGITALVIEW® LCD Controller Boards and Accessories

Digital View is the leading supplier of advanced interface solutions for the flat panel display market.

Description	Digi-Key Part No.	1	Price Each 10	50	Digital View Part No.
<b>Controller Boards — RoHS Compliant</b>					
ALR-1400 PC,DVI Controller for TFT Panel .....	586-1016-ND	95.59	—	—	4171000XX-3
SP-1600 PC, DVI Controller for TFT Panel .....	586-1019-ND	191.18	—	—	4169900XX-3
<b>Accessories</b>					
Add-on Board for LVDS Displays .....	586-1020-ND◆	44.42	—	—	416212201-3
Add-on Board for LVDS Displays .....	586-1002-ND	44.42	—	—	4162135-XX
4-Way Inverter Cable .....	586-1007-ND◆	7.26	5.45	4.91	426040200
5-Way Inverter Cable .....	586-1008-ND◆	7.26	5.45	4.91	426058300-3
Cable for Controller ACG-1024 (4167202-xx) .....	586-1009-ND◆	31.94	23.96	21.57	426311200-3
Cable for Controller ACG-1024 (4167201-xx) .....	586-1010-ND◆	27.59	20.70	18.63	426311600
LVDS Cable for Controller AL-1280 (4169300-xx) .....	586-1013-ND◆	33.40	25.05	22.55	426473000
LVDS Cable .....	586-1014-ND◆	20.33	15.25	13.73	426474300-3
Panel Cable for Controller SVH-1920 (4263112-00) .....	586-1017-ND◆	29.04	21.78	19.61	426500400-3
Panel Cable for Controller SVH-1920 (4263116-00) .....	586-1018-ND◆	29.04	21.78	19.61	426500500-3
<b>Kit</b>					
OSD Board Kit with Cable ACG/AVP/SVP/SV .....	586-1015-ND	34.85	26.14	23.53	KIT 60109

◆ RoHS Compliant

**Free shipping on orders over £50! All prices are in British pound sterling and include duties.**

2284 (UK091) uk.digikey.com — FREEPHONE: 0-800-587-0991 • 0-800-904-7786 — FREEFAX: 0-800-587-0992 • 0-800-904-7783