



# TFT

Display the LCDs

*D i f f e r e n c e*

with Kyocera



# KYOCERA Global Manufacturing Network



**Shiga: Kyocera Display Corp  
HQ & Yasu Plant (JAPAN)**



**Kagoshima Plant (JAPAN)**



**Sendai Plant (JAPAN)**



**Lamphun Plant (Thailand)**



**Michigan Plant (USA)**



JAPAN

ASIA



**Hiroshima Plant (JAPAN)**



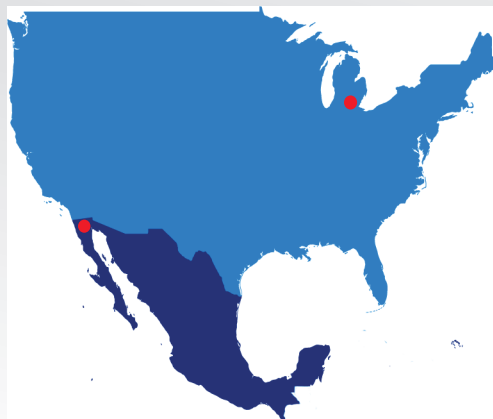
**Kyoto: Kyocera HQ  
(JAPAN)**



**Zhangjiagang Plant (CHINA)**



**Dongguan Plant (CHINA)**



NORTH AMERICA



**Tijuana Plant (MEXICO)**

## Special Features / Technologies

Kyocera's TFT LCDs provide exceptional high contrast ratio, color saturation, luminance and superior performance enhancements such as Advanced Wide Viewing (AWV) for true color fidelity, Super-High Brightness (SHB) and Wide Temperature range.



LED Backlight

- No warm-up time
- Improved EMI performance
- Reduced power consumption when compared to CCFL backlighting
- Wider dimming ratio
- Long life to 75K hours
- No mercury, environmentally friendly.



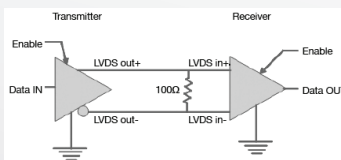
Advanced Wide View

- Viewing angle (85/85/85/85)
- True color accuracy
- Minimum color shifting
- Currently available on the 7.0", 8.4", 8.5", 10.4", 12.1" product offering



Super High Brightness

- Minimum "wash-out" phenomenon when used in direct sunlight
- Improved readability in direct sunlight
- Up to 1500nits!
- High efficiency LEDs



LVDS Interface

- Reduced voltage swing and dramatically improved EMI performance
- Standard LVDS interface for easy system design
- Best overall performance.



Touch Screens

- Standard size from 3.5" ~ 12.1"
- High quality, reliability and durability
- Custom touch solutions available
- Long-term supply

## Kyocera Industrial TFT LCD Line-up

Kyocera is focused on small to mid-size display products. Our TFT LCDs deliver best-in-class performance for a wide variety of Industrial, Medical and Automotive applications.

Size	Resolution	Part Number	Nits	Con- trast	Back- light	CCC built-in	Inter- face	Viewing Angle	Operating Temp.	Features
3.0"	240 x 400	T-55149GD030J-MLW-AQN	400	25:1	LED	-	CMOS	(h v): -30/40 -30/35	-20 to 70°C	
3.5"	320 X 240	TCG035VLPAAANN-AN00	400	1000:1	LED	-	CMOS	(h v): ±80 -60/80	-20 to 70°C	
3.5"	320 x 240	T-55343GD035JU-LW-ADN	400	700:1	LED	-	CMOS	(h v): ±80   ±80	-20 to 70°C	
4.3"	480 x 272	TCG043WQLBAANN-GN00	450	350:1	LED	-	CMOS	(h v): ±70   -60/65	-20 to 70°C	
4.3"	480 x 272	TCG043WQLBAANN-GN50	800	350:1	LED	-	CMOS	(h v): ±70   -60/65	-20 to 70°C	HB
5.7"	320 x 240	TCG057QVLBA-G00	300	500:1	LED	-	CMOS	(h v): ±80   ±80	-20 to 70°C	
5.7"	320 x 240	TCG057QVLGA-G00	500	500:1	LED	-	CMOS	(h v): ±80   ±80	-20 to 70°C	
5.7"	320 x 240	TCG057QVLCA-G00	350	500:1	LED	-	CMOS	(h v): ±80   ±80	-20 to 70°C	
5.7"	320 x 240	TCG057QVLCS-H50	1000	500:1	LED	-	CMOS	(h v): ±80   ±80	-20 to 70°C	SHB
5.7"	320 x 240	T-55265GD057J-LW-ADN	500	350:1	LED	-	CMOS	(h v): ±70   ±70	-20 to 70°C	
5.7"	320 x 240	T-55520GD057J-LW-ACN	800	350:1	LED	-	CMOS	(h v): ±70   ±70	-20 to 70°C	
5.7"	640 x 480	TCG057VGLBA-G00	250	500:1	LED	-	CMOS	(h v): ±80   ±80	-20 to 70°C	
5.7"	640 x 480	TCG057VGLGA-G00	400	500:1	LED	-	CMOS	(h v): ±80   ±80	-20 to 70°C	
5.7"	640 x 480	TCG057VGLCA-G00	300	500:1	LED	-	CMOS	(h v): ±80   ±80	-20 to 70°C	
5.7"	640 x 480	TCG057VGLCS-H50	800	500:1	LED	-	CMOS	(h v): ±80   ±80	-20 to 70°C	HB
5.7"	640 x 480	T-55548GD057JU-LW-ABN	500	500:1	LED	-	CMOS	(h v): ±70   ±70	-20 to 70°C	
5.7"	640 x 480	T-55620GD057JU-LW-AAN	500	500:1	LED	-	LVDS	(h v): ±70   ±70	-20 to 70°C	
6.2"	640 x 240	TCG062HVLDA-G20	300	500:1	LED	-	CMOS	(h v): ±80   ±80	-20 to 70°C	
6.5"	640 x 480	T-51750GD065J-LW-AON	750	300:1	LED	-	CMOS	(h v): ±55   -60/30	-20 to 70°C	HB
6.5"	640 x 480	T-51750GD065J-LW-ANN	600	300:1	LED	-	CMOS	(h v): ±55   -55/30	-20 to 70°C	
6.5"	640 x 480	T-55619GD065J-LW-AAN	750	300:1	LED	-	LVDS	(h v): ±55   -60/30	-20 to 70°C	HB
7.0"	800 x 480	TCG070WLPAAANN-AN00	350	1000:1	LED	-	CMOS	(h v): ±80   -80/60	-20 to 70°C	
7.0"	800 x 480	TCG070WVLPAAANN-AN50	700	1000:1	LED	-	CMOS	(h v): ±80   -80/60	-20 to 70°C	HB
7.0"	800 x 480	TCG070WVLQAPNN-AN00	350	500:1	LED	-	CMOS	(h v): ±85   ±85	-20 to 70°C	AWV
7.0"	800 x 480	TCG070WVLPEANN-AN20	350	1000:1	LED	Yes	LVDS	(h v): ±80   -80/60	-20 to 70°C	
7.0"	800 x 480	TCG070WVLPEANN-AN30	700	1000:1	LED	Yes	LVDS	(h v): ±80   -80/60	-20 to 70°C	HB
7.0"	800 x 480	TCG070WVLQEPNN-AN20	350	500:1	LED	Yes	LVDS	(h v): ±85   ±85	-20 to 70°C	AWV,
7.0"	800 x 480	T-55785GD070J-LW-ABN	1000	700:1	LED	Yes	LVDS	(h v): ±85   ±85	-30 to 80°C	AWV,SHB

Size	Resolution	Part Number	Nits	Con- trast	Back- light	CCC built-in	Inter- face	Viewing Angle	Operating Temp.	Features
7.5"	640 x 480	TCG075VGLAANN-GN00	400	500:1	LED	-	CMOS	(h v): ±80   -80/80	-20 to 70°C	
7.5"	640 x 480	TCG075VGLDA-G00	250	500:1	LED	-	CMOS	(h v): ±80   -80/80	-20 to 70°C	
7.5"	640 x 480	TCG075VGLCE-G00	280	500:1	LED	-	CMOS	(h v): ±80   -80/80	-20 to 70°C	
8.4"	640 x 480	TCG084VGLAANN-AN00	450	500:1	LED	-	CMOS	(h v): ±65   -65/60	-20 to 70°C	
8.4"	640 x 480	TCG084VGLAANN-AN50	850	500:1	LED	-	CMOS	(h v): ±65   -65/60	-20 to 70°C	HB
8.4"	640 x 480	TCG084VGLACANN-AN00	550	500:1	LED	-	CMOS	(h v): ±70   -70/60	-20 to 70°C	
8.4"	800 x 600	TCG084SVLPAANN-AN20	400	800:1	LED	Yes	LVDS	(h v): ±80   -60/80	-20 to 70°C	
8.4"	800 x 600	TCG084SVLP*ANN-AN*13	750	800:1	LED	Yes	LVDS	(h v): ±80   -60/80	-20 to 70°C	HB
8.4"	800 x 600	TCG084SVLQAPNN-AN20	400	500:1	LED	Yes	LVDS	(h v): ±85   ±85	-20 to 70°C	AWV
8.4"	800 x 600	T-55786GD084J-LW-AAN	600	1000:1	LED	Yes	LVDS	(h v): ±85   ±85	-30 to 80°C	AWV
8.4"	800 x 600	T-55786GD084J-LW-ACN	1200	1000:1	LED	Yes	LVDS	(h v): ±85   ±85	-30 to 80°C	AWV, SHB
8.5"	800 x 480	TCG085WVLCB-G00	400	500:1	LED	-	CMOS	(h v): ±60   -45/60	-20 to 70°C	
8.5"	800 x 480	TCG085WVLQDPNN-GN00	400	500:1	LED	-	CMOS	(h v): ±85   ±85	-20 to 70°C	AWV
10.1"	1280 x 800	TCG101WXLP*ANN-AN*03	400	800:1	LED	Yes	LVDS	(h v): ±80   -60/80	-20 to 70°C	
10.4"	640 x 480	TCG104VGLAANN-AN00	400	500:1	LED	-	CMOS	(h v): ±70   -70/60	-20 to 70°C	
10.4"	640 x 480	TCG104VGLAANN-AN20	400	500:1	LED	Yes	CMOS	(h v): ±70   -70/60	-20 to 70°C	
10.4"	640 x 480	TCG104VGLABANN-AN50	800	500:1	LED	-	CMOS	(h v): ±70   -70/60	-20 to 70°C	HB
10.4"	800 x 600	TCG104SVLPAANN-AN20	450	900:1	LED	Yes	LVDS	(h v): ±80   -60/80	-20 to 70°C	
10.4"	800 x 600	TCG104SVLPEANN-AN30	700	900:1	LED	Yes	LVDS	(h v): ±80   -60/80	-20 to 70°C	HB,
10.4"	800 x 600	TCG104SVLQAPNN-AN20	400	500:1	LED	Yes	LVDS	(h v): ±85   ±85	-20 to 70°C	AWV
10.4"	800 x 600	T-55787GD104J-LW-AAN	700	1000:1	LED	Yes	LVDS	(h v): ±85   ±85	-30 to 80°C	AWV, HB
10.4"	800 x 600	T-55787GD104J-LW-ACN	1200	1000:1	LED	Yes	LVDS	(h v): ±85   ±85	-30 to 80°C	AWV, SHB
12.1"	800 x 600	TCG121SVLPBANN-AN00	500	1000:1	LED	-	CMOS	(h v): ±80   -65/80	-20 to 70°C	
12.1"	800 x 600	TCG121SVLPAANN-AN20	500	1000:1	LED	Yes	LVDS	(h v): ±80   ±80	-20 to 70°C	
12.1"	800 x 600	TCG121SVLPAANN-AN*16	800	1000:1	LED	Yes	LVDS	(h v): ±80   ±80	-20 to 70°C	
12.1"	800 x 600	TCG121SVLQAPNN-AN20	450	500:1	LED	Yes	LVDS	(h v): ±85   ±85	-20 to 70°C	AWV
12.1"	800 x 600	T-55788GD121J-LW-AAN	600	850:1	LED	Yes	LVDS	(h v): ±85   ±85	-30 to 80°C	AWV
12.1"	800 x 600	T-55788GD121J-LW-ACN	1200	850:1	LED	Yes	LVDS	(h v): ±85   ±85	-30 to 80°C	AWV, SHB
12.1"	1024 x 768	TCG121XGLP*PNN-AN*37	400	900:1	LED	Yes	LVDS	(h v): ±85   ±85	-30 to 80°C	AWV
12.1"	1280 x 800	TCG121WXLP*PNN-AN*01	500	500:1	LED	Yes	LVDS	(h v): ±85   ±85	-20 to 70°C	AWV,

## Kyocera Value-Line TFT LCD Line-up

As an enhancement to our industrial product line-up, Kyocera has introduced a new line of TFT displays in a wide range of sizes for higher volume cost sensitive applications.

Size	Resolution	Part Number	Nits	Con- trast	Back- light	CCC built-in	Interface	Viewing Angle	Operaing Temp
3.0"	240 x 400	TVL-55737GD030J-LW-G-AAN	300	400:1	LED	-	MCU 8080 16-bit	(h v): ±40   -20/50	-20 to 70°C
3.2"	240 x 320	TVL-55736GD032JR-LW-G-AAN	250	250:1	LED	-	MCU 8080 16-bit	(h v): 60/-50 -60/60	-20 to 70°C
3.2"	240 x 400	TVL-55731GD032J-LW-G-AAN	300	400:1	LED	-	MCU 8080 16-bit	(h v): ±60   -60/50	-20 to 70°C
3.2"	320 x 240	TVL-55738GD032J-LW-G-AAN	300	300:1	LED	-	24-bit RGB	(h v): ±65   -55/60	-20 to 70°C
3.2"	320 x 480	TVL-55739GD032J-LW-G-AAN	380	400:1	LED	-	18-bit RGB	(h v): ±60   -45/60	-20 to 70°C
3.5"	240 x 320	TVL-55730GD035JU-LW-G-ABN	250	300:1	LED	-	18/16-bit RGB	(h v): ±65   -55/60	-20 to 70°C
3.5"	320 x 240	TVL-55733GD035J-LW-G-AAN	280	300:1	LED	-	24-bit RGB	(h v): ±60   -60/55	-20 to 70°C
3.97"	480 x 800	TVL-55806GD040J-LW-G-AAN	300	700:1	LED	-	24-bit RGB	(h v): ±80   ±80	-20 to 70°C
4.3"	480 x 272	TVL-55724GD043J-LW-G-AAN	350	350:1	LED	-	24-bit RGB	(h v): ±70   -65/60	-20 to 70°C
5.0"	480 x 272	TVL-55781GD050J-LW-G-AAN	400	500:1	LED	-	18-bit RGB	(h v): ±65   -60/50	-20 to 85°C
7.0"	800 x 480	TVL-55728D070J-LW-I-AAN	500	500:1	LED	-	24-bit RGB	(h v): ±70   -60/50	-20 to 70°C
9.0"	800 x 480	TVL-55729D090J-LW-I-AAN	300	500:1	LED	-	24-bit RGB	(h v): ±70   -70/50	-20 to 70°C
10.1"	1024 x 600	TVL-55682D101U-LW-I-AAN	200	500:1	LED	-	LVDS	(h v): ±45   -35/15	0 to 50°C
11.6"	1366 x 768	TVL-55683D116U-LW-I-AAN	220	500:1	LED	-	LVDS	(h v): ±75   -60/50	0 to 50°C
13.3"	1366 x 768	TVL-55790D133-LW-I-AAN	220	500:1	LED	-	LVDS	(h v): ±40   -35/15	0 to 50°C
13.3"	1366 x 768	TVL-55789D133-LW-I-AAN	220	500:1	LED	-	eDPI.1a	(h v): ±75   -60/50	0 to 50°C
14.0"	1366 x 768	TVL-55684D140U-LW-I-AAN	200	500:1	LED	-	LVDS	(h v): ±45   -35/15	0 to 50°C
15.0"	1024 x 768	TVL-55911D150-LW-I-AAN	500	800:1	LED	-	LVDS	(h v): ±80   ±80	-30 to 85°C

## High Quality State-of-the-art Products

For 36 years, Kyocera has listened carefully to our customers and their requirements. We will continue to create new displays featuring the most advanced technology and the highest product quality in the market place.

### Quality Certifications

- ISO /TS 16949 (Automotive Standard)
- VDA-6 (European Automotive Quality Standard)
- ISO 9000
- ISO 14000




## Quickstart Your Design with LCD ToolKITS

Kyocera LCD ToolKITS provide a convenient solution to reduce design time as well as procurement time.

### LCD ToolKITS include:

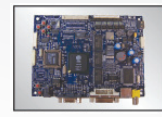
- TFT-LCD panel
- Controller board
- LED drivers, when required
- Cables
- Power supply

The Kyocera LCD ToolKIT is a true plug-and play solution designed to enable our customers to rapidly move from the concept stage to product visualization. Please contact us for detailed information.

*It's all  
in the Box*



TFT Panel



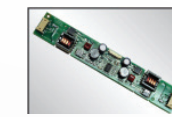
TFT Controller Board



VGA (Analog RGB) Cable



DVI (Digital) Video Cable



Backlight Inverter



12V DC Power Supply

## Kyocera Value-added Assembly Capability

Our Value-added assembly facilities in Michigan and Tijuana consist of state-of-the-art flexible production areas. Michigan features a class 1K clean room. The production areas are well-lit environments that are ESD, humidity and temperature controlled.

Kyocera is a Total LCD solution provider. Our production facilities offer a wide range of solutions while maintaining our factory warranty.

Some of our current solutions are:

- Touch screen integration
- Electromechanical assembly
- Full product assembly and test

Please contact us for detailed information.



## Long-Term Stable Supply

Long-term supply is a requirement necessary to the success of industrial applications. Kyocera is committed to continuity and long product life in order to support market needs. Kyocera's commitment assures our customers a stable supply throughout the life of their product.

## Ecological Measures

Kyocera has developed eco-friendly products such as LCD modules with mercury-free LED backlights. We are committed to continuously reduce toxic substances and develop environmentally friendly products.



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