

Short Form Catalog

Displays

Active Matrix LCD (TFT)
Passive Matrix LCD (Monochrome)
Customized LCD



A division of the ZETTLER Group
www.azdisplays.com
www.zettler-group.com

Worldwide

Display Solution Provider

About Us

AZ Displays manufactures a wide array of industrial grade TFT displays at competitive prices.

These displays are available as standard off-the-shelf products as well as fully customizable, turn-key solutions. AZ Displays has provided these solutions to key players in the medical, industrial, HVAC, white goods, and pool/spa markets. Within these markets we have created custom-tailored designs to address specific requirements for the PCAP and resistive touch panels, cover glass, backlights, gaskets, PCBA's, and many other value-added options.

With an extensive product offering in IPS (In-Plane-Switching) panels, our solutions offer wide viewing angles, vivid color representation, and stable response times while maintaining a competitive edge. By vertically integrating the majority of the LCD manufacturing process at our factory, we are able to support roadmaps for 5 to 7 years on our core product offering.

In addition to our TFT line-up, we offer a wide range of passive monochrome displays. Our standard product offering of character and graphic displays are all available with multiple optical characteristics (polarizer, fluids, backlights). We are able to provide fully customized solutions including 100% drop-in replacements to existing designs.

As a member of the global entity, ZETTLER Group, we pride ourselves in supporting the North American market. Being headquartered in Vista, California allows us to provide fast response times and local sales and engineering support for your design needs.

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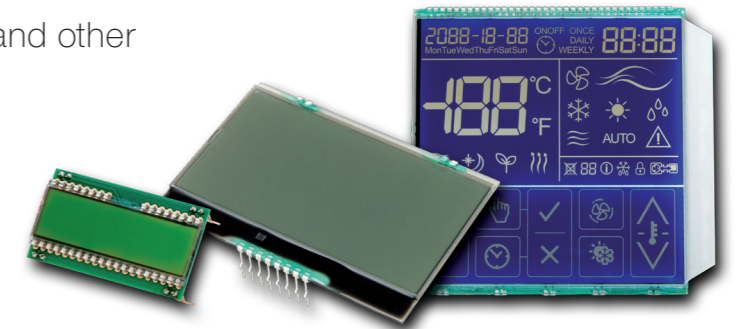
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Customized Display Solutions

For Passive Matrix Displays


- LCD Glass: Graphic, Character, Icon, 7 Segment or Combination
- Backlight: Color, Shape and Mounting Preparation
- Interface: Parallel, SPI and I²C
- Connector: Multi-Pin Connector, ZIF or Cable Connector
- Cables: FFC, FPC and other
- PCB and Assembly



For Active Matrix Displays

- Touch Panel: Resistive or Projected Capacitive
- Cover Lens: Multi-Color Printed, Edge Treatment
- Surface Treatment: Clear, Anti-Glare, Anti-Reflective or Anti-Fingerprint
- Interface: MCU, MIPI, RGB, LVDS or HDMI (with scaler board)
- Optical Enhancements



In 
 Plane 
 Switching 

IPS Displays

AZ DISPLAYS INC.
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Size (inch)	1.3	1.54	2.4	2.8
Resolution H x V (px)	240 x 240	240 x 240	240 x 320	240 x 320
Series	ATM0130B3	ATM0154B1	ATM0240B32	ATM0280B3A
Brightness (nits)	500	500	350	1000
Contrast (x:1)	800	900	800	800
Interface	RGB/MCU	SPI	SPI	RGB/MCU
Backlight Lifetime (h)	30k	50k	30k	30k
Outline Dimensions (mm)	26.85 x 29.55 x 1.73	31.52 x 33.72 x 1.95	42.72 x 60.26 x 2.20	48.20 x 67.85 x 2.80
Viewing Angle (L/R/U/D)	IPS	IPS	IPS	IPS
Operating Temperature (°C)	-20~+70	-20~+60	-20~+60	-20~+70
Touch Resistive	-	-	-	-
Touch PCAP	-	-	-	-

3.5	3.5	4	4.3	5
320 x 240	320 x 480	480 x 480	800 x 480	800 x 480
ATM0350D17	ATM0350B53	ATM0400D1	ATM0430D44	ATM0500D27
500	300	400/1000	700	400/700/1100
800	1000	800	800	1000
RGB	RGB/MCU	RGB	RGB	RGB
30k	50k	50k	30k	50k
76.90 x 63.90 x 3.30	54.46 x 82.94 x 2.15	77.00 x 80.00 x 2.5	105.50 x 67.20 x 2.6	120.70 x 75.80 x 3.00
IPS	IPS	IPS	IPS	IPS
-30~+80	-20~+70	-20~+70	-20~+70	-20~+70
•	-	-	•	•
-	•	-	•	•

In 
 Plane 
 Switching 

IPS (In-Plane Switching) technology delivers wide symmetrical viewing angles of 170-178 degree that allow the LCDs to output sharp, vivid optics with no color shifting or contrast degradation. In comparison to traditional TN panels, IPS panels perform with exceptional color saturation, high contrast ratios, and “true black” colors.



Size (inch)	6.8	7	7	7.84
Resolution H x V (px)	480 x 1280	1024 x 600	800 x 480	400 x 1280
Series	ATM0680L2	ATM0700L61	ATM0700L76	ATM0784L2N
Brightness (nits)	450/1100	600/1000	1100	500
Contrast (x:1)	800	1000	900	900
Interface	MIPI	LVDS	LVDS	MIPI
Backlight Lifetime (h)	20k	30k	100k	20k
Outline Dimensions (mm)	66.60 x 181.00 x 4.50	164.90 x 100.00 x 3.5	170.00 x 110.00 x 9.00	205.78 x 67.80 x 4.75
Viewing Angle (L/R/U/D)	IPS	IPS	IPS	IPS
Operating Temperature (°C)	-20~+70	-20~+70	-40~+85	-20~+70
Touch Resistive	-	●	●	-
Touch PCAP	●	●	●	●

10.1	10.3	10.4	12.3	15.6
1280 x 800	1920 x 720	1024 x 768	1920 x 720	1920 x 1080
ATM1010L35	ATM1025L1	ATM1040L10A	ATM1230L2	ATM1560L1
1000	850	1200	1000	450/1350
800	1000	1000	1100	800
LVDS	LVDS	LVDS	LVDS	LVDS
70k	20k	50k	50k	50k
229.80 x 149.00 x 6.00	259.80 x 112.00 x 12.20	238.6 x 175.8 x 6.5	308.00 x 127.00 x 8.50	387.73 x 237.09 x 12.05
IPS	IPS	IPS	IPS	IPS
-20~+70	-30~+85	-30~+80	-30~+85	-20~+70
●	-	-	-	-
●	●	-	-	●

TN Displays

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Size (inch)	1.77	2.31	2.8	3.5
Resolution H x V	128 x 160	320 x 240	240 x 320	320 x 240
Series	ATM0177B3A	ATM0231D2	ATM0280B23B	ATM0350D19
Outline Dimension (W x H x T in mm)	34.70 x 46.7 x 2.5	51.00 x 45.80 x 2.50	50.00 x 69.20 x 2.45	76.9 x 63.9 x 3.3
Viewing Angle Left	70	65	65	75
Viewing Angle Right	70	65	65	75
Viewing Angle Up	30	55	55	55
Viewing Angle Down	45	65	50	60
Wide View Polarizer	-	-	-	•
Brightness (nits)	450	350	150	625
Contrast (x:1)	500	500	300	450
Backlight Lifetime (in hours)	30k	30k	30k	30k
Interface	4-wire SPI	RGB	Parallel 8080	RGB
Operating Temperature (C)	-20 ... +70	-20 ... +70	-20 ... +70	-20 ... +70
resistive touch option	•	-	-	•
PCAP touch option	-	-	-	-

4.3	5	5	7	8	9
480 x 272	800 x 480	800 x 480	800 x 480	800 x 600	800 x 480
ATM0430D12	ATM0500D19	ATM0500D19E/K	ATM0700D6	ATM0800D9	ATM0900D1
105.5 x 67.2 x 2.9	120.7 x 75.8	120.7 x 75.8	164.9 x 100.0 x 5.7	183.0 x 141.0 x 6.4	211.1 x 126.5 x 5.9
70	70	80	70	70	70
70	70	80	70	70	70
70	70	80	70	70	50
50	50	80	50	50	70
•	-	•	-	-	-
500 / 800 / 1300	350	520 / 1060	500 / 1000	350	250
500	500	800	500	500	500
20k	50k	50k	30k	20k	20k
RGB / (MCU)	RGB	RGB / LVDS	RGB / LVDS / (MCU)	RGB	RGB / LVDS
-20 ... +70	-20 ... +70	-20 ... +70	-20 ... +70	-20 ... +70	-20 ... +70
•	•	•	•	•	-
•	•	•	•	-	-

Monochrome TFT (active matrix)

AZ DISPLAYS INC.
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Resolution H x V (px)	240 x 128	320 x 240	480 x 256	Advantages <ul style="list-style-type: none"> • Multiple Background color options. • Multiple font color options. • Higher contrast • Improved viewing angles
Series	ATM2412B	ATM3224H	ATM4825A	
Outline Dimension W x H x T (mm)	144.0 x 104.0 x 10.0	144.0 x 104.0 x 10.1	144.0 x 104.0 x 10.0	
Viewing Area W x H (mm)	113.5 x 64.0	114.9 x 86.67	113.5 x 65.0	
Dot Size W x H (mm)	0.462 x 0.462	0.3528 x 0.3528	0.231 x 0.231	
Dot Pitch W x H (mm)	0.462 x 0.462	0.3528 x 0.3528	0.231 x 0.231	
Controller	UCI6963	RA8835	RA8835	
Interface	4-wire SPI	MCU	MCU	Custom solutions available.



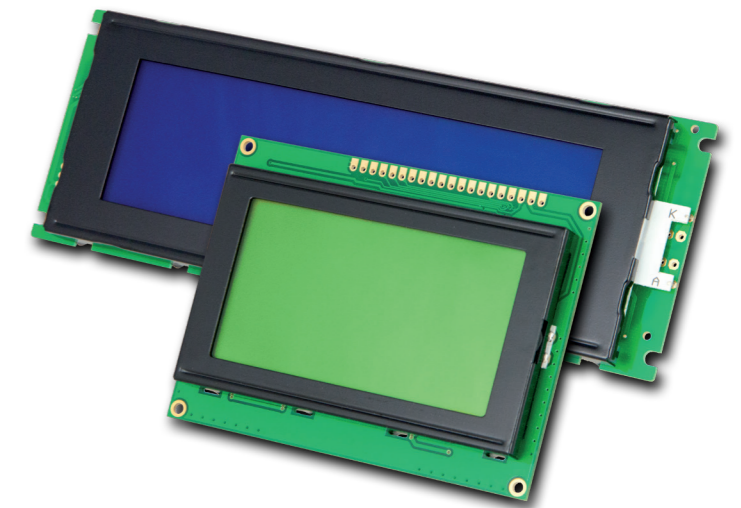
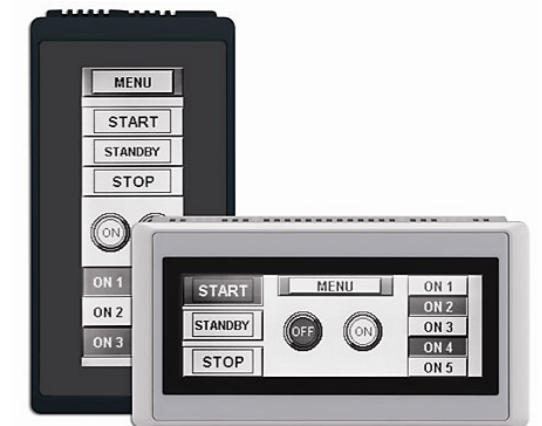
Graphics Displays (passive matrix)

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Resolution H x V (px)	160 x 32	192 x 64	240 x 64	240 x 128
Series	AGM16032A	AGM1964C	AGM2464B	AGM2412A
Outline Dimension W x H x T (mm)	85.0 x 29.5 x 13.5	130.0 x 65.0 x 13.5	180.0 x 65.0 x 15	144.0 x 104.0 x 13.5
Viewing Area W x H (mm)	64.5 x 16.4	104.0 x 39.0	133.0 x 39.0	114.0 x 64.0
Dot Size W x H (mm)	0.33 x 0.33	0.458 x 0.458	0.49 x 0.49	0.40 x 0.40
Dot Pitch W x H (mm)	0.37 x 0.37	0.508 x 0.508	0.53 x 0.53	0.45 x 0.45
Controller	ST7920	NT7107	RA6963	RA6963
Bonding Type	COB	COB	COB	COB

Graphics Displays (passive matrix)

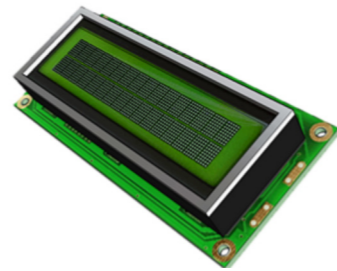
122 x 32	122 x 32	128 x 64	128 x 64	128 x 64
AGM1232E	AGM1232G	AQM1264PB	AGM1264K	AGM1264F
65.4 x 27.4 x 9.0	84.0 x 44.0 x 13.5	89.7 x 49.8 x 6.0	78.0 x 70.0 x 13.5	93.0 x 70.0 x 13.5
59.0 x 18.5	60.0 x 18.0	66.8 x 35.5	62.0 x 44.0	70.7 x 38.8
0.40 x 0.45	0.40 x 0.45	0.48 x 0.48	0.44 x 0.56	0.48 x 0.48
0.44 x 0.49	0.44 x 0.49	0.50 x 0.50	0.48 x 0.62	0.52 x 0.52
PT6520	PT6520	ST7565P	NT7107	NT7107
8-bit MCU	8-bit MCU	8-bit MCU	8-bit MCU	8-bit MCU



Character Displays (passive matrix)

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Display Format	8 x 1	8 x 2	8 x 2	12 x 2
Series	ACM0801B	ACM0802A	ACM0802C	ACM1202B
Outline Dimension W x H x T (mm)	54.0 x 37.0 x 13.0	40.0 x 35.4 x 9.0	58.0 x 32.0 x 13.5	59.0 x 32.0 x 12.8
Viewing Area W x H (mm)	32.1 x 16.0	30.4 x 13.9	38.0 x 16.0	46.0 x 14.5
Dot Size W x H (mm)	2.90 x 7.60	2.95 x 4.75	2.96 x 5.56	2.65 x 5.50
Dot Pitch W x H (mm)	0.50 x 0.60	0.55 x 0.55	0.56 x 0.66	0.45 x 0.60
Controller	ST7066	ST7066	ST7066	ST7066
Bonding Type	COB	COB	COB	COB



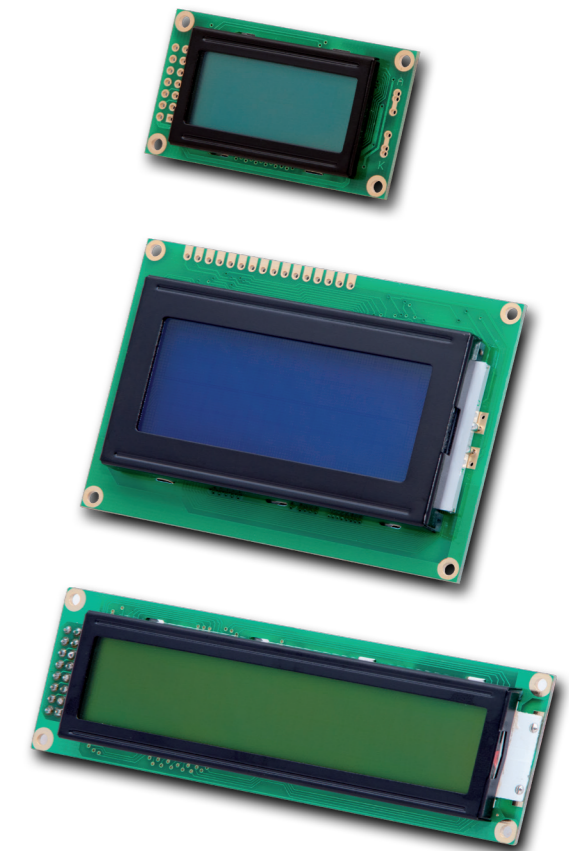
16 x 1	16 x 1	16 x 2	16 x 2	16 x 2
ACM1601C	ACM1601H	ACM1602B	ACM1602E	ACM1602K
80.0 x 36.0 x 13.5	122.0 x 33.0 x 13.0	84.0 x 44.0 x 13.0	85.0 x 36.0 x 13.5	80.0 x 36.0 x 13.5
64.5 x 14.0	100.0 x 14.0	64.5 x 16.4	64.5 x 16.4	64.5 x 16.4
3.07 x 6.56	4.84 x 9.22	3.00 x 5.23	3.00 x 5.23	3.00 x 5.23
0.55 x 0.75	0.92 x 1.10	0.56 x 0.61	0.56 x 0.61	0.56 x 0.61
ST7066	ST7066	ST7066	ST7066	ST7066
COB	COB	COB	COB	COB

Character Displays (passive matrix)

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Display Format	16 x 2	16 x 4	20 x 2	20 x 4
Series	ACM1602S	ACM1604C/D	ACM2002D/E	ACM2004D/G
Outline Dimension W x H x T (mm)	122.0 x 44.0 x 13.5	87.0 x 60.0 x 13.7	116.0 x 37.0 x 13.7	98.0 x 60.0 x 14.2
Viewing Area W x H (mm)	99.0 x 24.0	61.8 x 25.2	83.0 x 18.6	76.0 x 25.2
Dot Size W x H (mm)	5.20 x 9.55	2.95 x 4.75	3.20 x 5.55	2.95 x 4.75
Dot Pitch W x H (mm)	1.00 x 1.15	0.55 x 0.55	0.60 x 0.65	0.55 x 0.55
Controller	ST7066	SPLC780	ST7066	ST7066
Bonding Type	COB	COB	COB	COB

20 x 4	24 x 2	40 x 4
ACM2004F	ACM2402C	ACM4004H/K
146.0 x 62.5 x 13.5	118.0 x 36.0 x 13.7	190.0 x 54.0 x 13.7
123.0 x 42.5	94.5 x 18.0	147.0 x 29.5
4.85 x 9.23	3.2 x 5.55	2.78 x 4.89
0.93 x 1.11	0.60 x 0.65	0.50 x 0.55
ST7066	ST7066	ST7066
COB	COB	COB



Other versions on request.



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