

AVNET EMBEDDED SPECIFICATION.

Datasheet
Powertip
PG320240M

Specification of LCD Module type

PG320240 – ¼ VGA

1. General Description

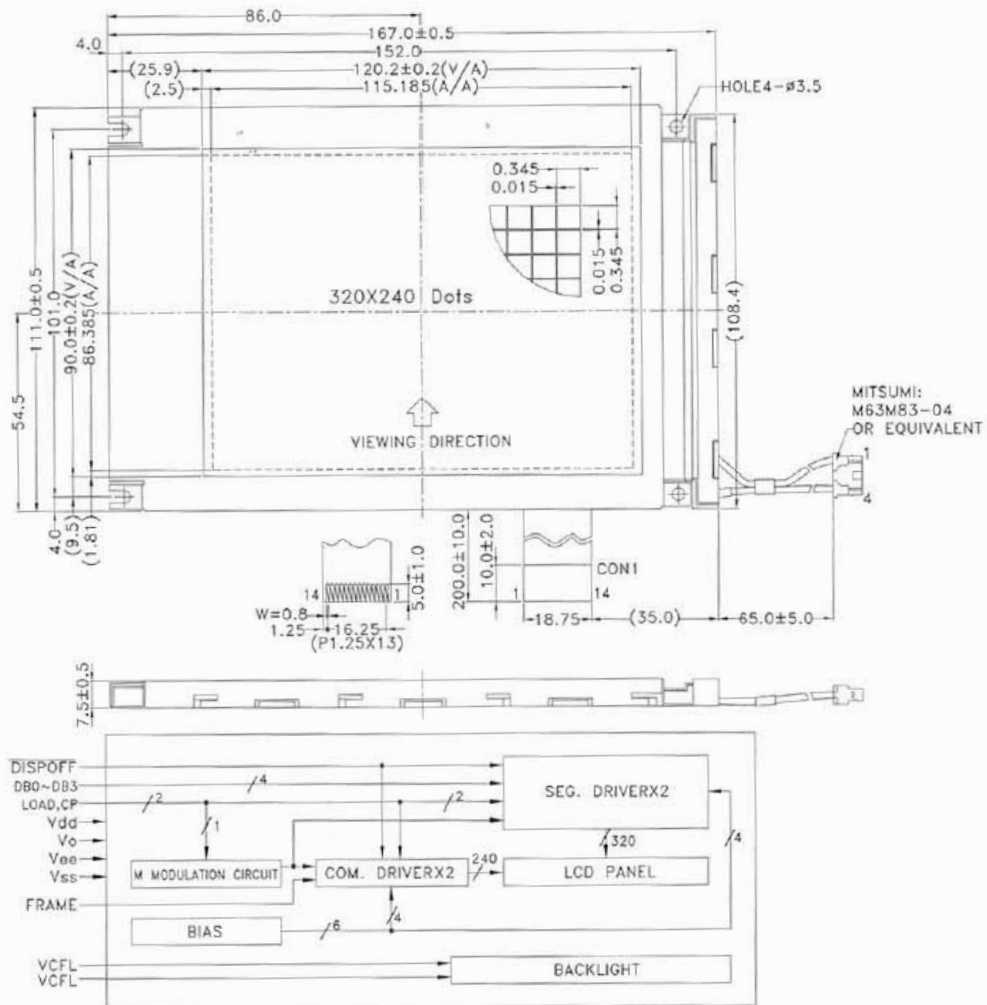
- Small Form Factor Full Graphics 320 x 240 pixels, Touch panel option
- Optional Integral Controller/Driver type T6963C.....not available on all resolutions(application note available on request)
- STN, FSTN** Positive and Negative mode**
- Optional LED Backlight (note including Backlight will increase height of module (see drawing)
- Variety of Backlight colours Green, White**, Blue**, Red**, Amber **
- Temperature Ranges 0 to 50°C, -20 to 70°C**
- View angle 6 o'clock other options on special request**

** Items marked are non standard options, and may carry factory MOQ. Please check with your local sales office for availability of the options.

2. Mechanical Specifications

Table 1

Parameter	Specifications	Unit
Outline Dimensions	167.0 (W) x 111.0 (H) x 7.5 (D) max NOTE Depth (D) is lower without Backlight	mm
View Area VA	120.2 (W) x 90.0 (H)	mm
Format	320 (W) x 240 (H) Pixels	
Pixel Size	0.345 (W) x 0.345 (H)	mm
Pixel Spacing	0.015 (W) x 0.015 (H)	mm
Pixel Pitch	0.36 (W) x 0.36 (H)	mm
Active Area	115.185 (W) x 86.385 (H)	mm



Absolute Maximum Rating

Item	Symbol	Condition	Min.	Max.	Units
Supply for logic voltage	V _{dd} -V _{ss}	25°C	-0.3	7.5	V
LCD driving supply voltage	V _{dd} -V _{ee}	25°C	-0.3	45.0	V
Input Voltage	V _{IN}	25°C	-0.3	V _{DD} +0.3	V

Electrical Characteristics

Item	Symbol	Condition	Min.	Typical	Max.	Units			
Power supply voltage	V _{dd} -V _{ss}	25°C	2.7	5.0	5.5	V			
LCD operation voltage (V _{DD} =5V)	V _{OP}	Top	N	W	N	W	N	W	V
		-20°C	-	23.5	-	24.0	-	24.5	V
		0°C	-	-	-	-	-	-	V
		25°C	-	22.5	-	23.0	-	23.5	V
		50°C	-	-	-	-	-	-	V
		70°C	-	20.5	-	21.0	-	21.5	V
LCM current consumption (No B/L)	I _{dd}	V _{dd} =5V	-	1.0	2.0	mA			
	I _{ee}	V _{dd} =5V	-	4.0	10.0	mA			
Backlight current consumption	White LED	B/L=3.3V	-	160	-	mA			

3. Interface Signals

Table 2

Pin No	Symbol	Description
1	DB0	Data Input
2	DB1	Data Input
3	DB2	Data Input
4	DB3	Data Input
5	/DISPOFF	Driver on (H)/off (L) enable
6	FRAME	First line mark
7	NC	No connection
8	LOAD	Input data latch signal
9	CP	Input data shift signal
10	Vdd	Logic power supply
11	Vss	Ground
12	Vee	Negative voltage
13	Vo	Contrast
14	Vss	Ground

Typical ordering code PG320240WRF-MNN-CQ

This is White LED Edge style Backlight (W), COB style (R), STN Display Transmissive, Negative Image (M), No Controller (NN), Standard Temperature Range 6 o'clock View (C), RoHS (Q)

Full part number and full specification will be confirmed dependant on the option selected i.e.

Display type, LED Type and Colour, Temperature Range etc

NOTE – TOUCHPANEL Option available

END

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