LCD / LCM SPECIFICATION

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RG160128A

General Specification

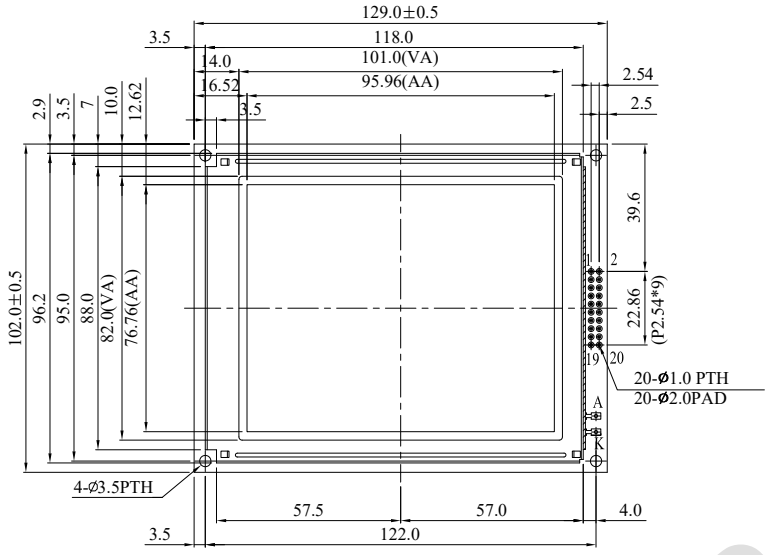
The Features is described as follow:

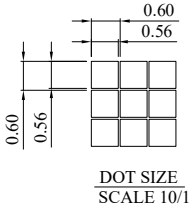
- Module dimension: 129.0 x 102.0 x 16.5 (max.) mm
- View area: 101.0 x 82.0 mm
- Active area: 95.96 x 76.76 mm
- Number of dots: 160 x 128
- Dot size: 0.56 x 0.56 mm
- Dot pitch: 0.60 x 0.60 mm
- LCD type: STN Negative, Blue Transmissive
- Duty: 1/128
- View direction: 6 o'clock
- Backlight Type: LED, White
- IC: RA6963

Interface Pin Function

Pin No.	Symbol	Level	Description
1	FG	—	Frame ground
2	Vss	—	Ground
3	Vdd	—	Power supply for logic
4	Vo	—	contrast adjustment
5	Vee	—	Negative Voltage Output
6	/WR	L	Data write. Write data into RA6963when WR = L
7	/RD	L	Data read. Read data from RA6963when RD = L
8	/CE	L	Chip enable the controller RA6963
9	C/D	H / L	WR=L , C/D=H : Command Write C/D=L: Data write RD=L , C/D=H : Status Read C/D=L: Data read
10	/HALT	L	Clock operating stop signal
11	/RESET	H / L	Reset signal
12	DB0	H / L	Data bus line
13	DB1	H / L	Data bus line
14	DB2	H / L	Data bus line
15	DB3	H / L	Data bus line
16	DB4	H / L	Data bus line
17	DB5	H / L	Data bus line
18	DB6	H / L	Data bus line
19	DB7	H / L	Data bus line
20	NC		No connection

Contour Drawing





DOT SIZE
SCALE 10/1

PIN NO.	SYMBOL
1	FG
2	Vss
3	VDD
4	Vo
5	Vee
6	$\overline{WR}$
7	$\overline{RD}$
8	$\overline{CE}$
9	C/$\overline{D}$
10	$\overline{HALT}$
11	$\overline{RESET}$
12	DB0
13	DB1
14	DB2
15	DB3
16	DB4
17	DB5
18	DB6
19	DB7
20	NC

The non-specified tolerance of dimension is ±0.3mm.

Absolute Maximum Ratings

Item	Symbol	Min	Typ	Max	Unit
Operating Temperature	T_{OP}	-20	–	+70	℃
Storage Temperature	T_{ST}	-30	–	+80	℃
Input Voltage	V_{IN}	-0.3	–	V_{DD}+0.3	V
Supply Voltage For Logic	V_{DD}-V_{SS}	-0.3	–	+7.0	V

Electrical Characteristics

Item	Symbol	Condition	Min	Typ	Max	Unit
Supply Voltage For Logic	V_{DD}-V_{SS}	–	4.5	5.0	5.5	V
Supply Voltage For LCD	V_{DD}-V_0	Ta=-20℃	–	–	22.1	V
		Ta=25℃	18.6	19.2	19.8	V
		Ta=70℃	16.8	–	–	V
Input High Volt.	V_{IH}	–	0.8V_{DD}	–	V_{DD}	V
Input Low Volt.	V_{IL}	–	0	–	0.15 V_{DD}	V
Output High Volt.	V_{OH}	–	V_{DD}-0.3	–	V_{DD}	V
Output Low Volt.	V_{OL}	–	0	–	0.3	V
Supply Current	I_{DD}	–	30	42	50	mA