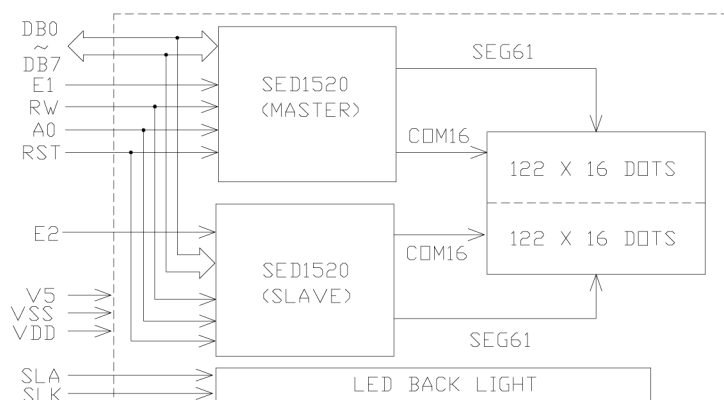


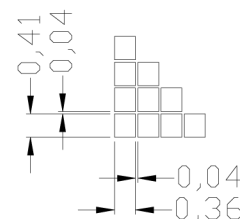
Standard LCD module

MG12232-12

BLOCK DIAGRAM



DISPLAY PATTERN



MECHANICAL SPECIFICATION

Item	Dimensions(W)X(H)	Unit
Overall Size	65.6×29.2	MM
View Area	54.8×19.1	MM
Dot Size	0.36×0.41	MM
Dot Pitch	0.40×0.45	MM

PIN ASSIGNMENT

Pin no	Symbol	Function
1	VDD	Power Supply(+)
2	VSS	Power Supply(GND)
3	VLCD	Contrast Adjust
4	RST	Reset
5	E1	Enable driver 1
6	E2	Enable driver 2
7	R/W	Data read / write
8	A0	Data/Instruction signal
9~16	DB0~DB7	Data bus line
17	SLA	Side light anode
18	SLK	Side light cathode

ABSOLUTE MAXIMUM RATING

Item	Symbol	Condition	Min	Max	Unit
Supply for logic voltage	VDD	25°C	0	6.7	V
LCD driving supply voltage	VLCD	25°C	0	10	V
Input voltage	VI	25°C	0	VDD	V

ELECTRICAL CHARACTERISTICS

Item	Symbol	Condition	Min	Typical	Max	Unit
Supply voltage for logic	VDD	---	2.7	---	4.5	V
Supply current for logic	IDD	---	---	0.3	1.0	mA
Operation voltage for LCD	VDD-VLCD	0°C	5.2	5.5	5.8	V
		25°C	5.1	5.4	5.7	V
		50°C	4.9	5.2	5.5	V
Input voltage " H " level	VIH	---	0.8VDD	---	VDD	V
Input voltage " L " level	VIL	---	0	---	0.2VDD	V
Supply voltage for back light	VF	---	---	2.1	2.6	V
Supply current for back light	IF	VF=2.1V	---	150	200	mA

REMARKS:

- 1 LCD options: STN, FSTN.
- 2 Back light type: LED side light feature.