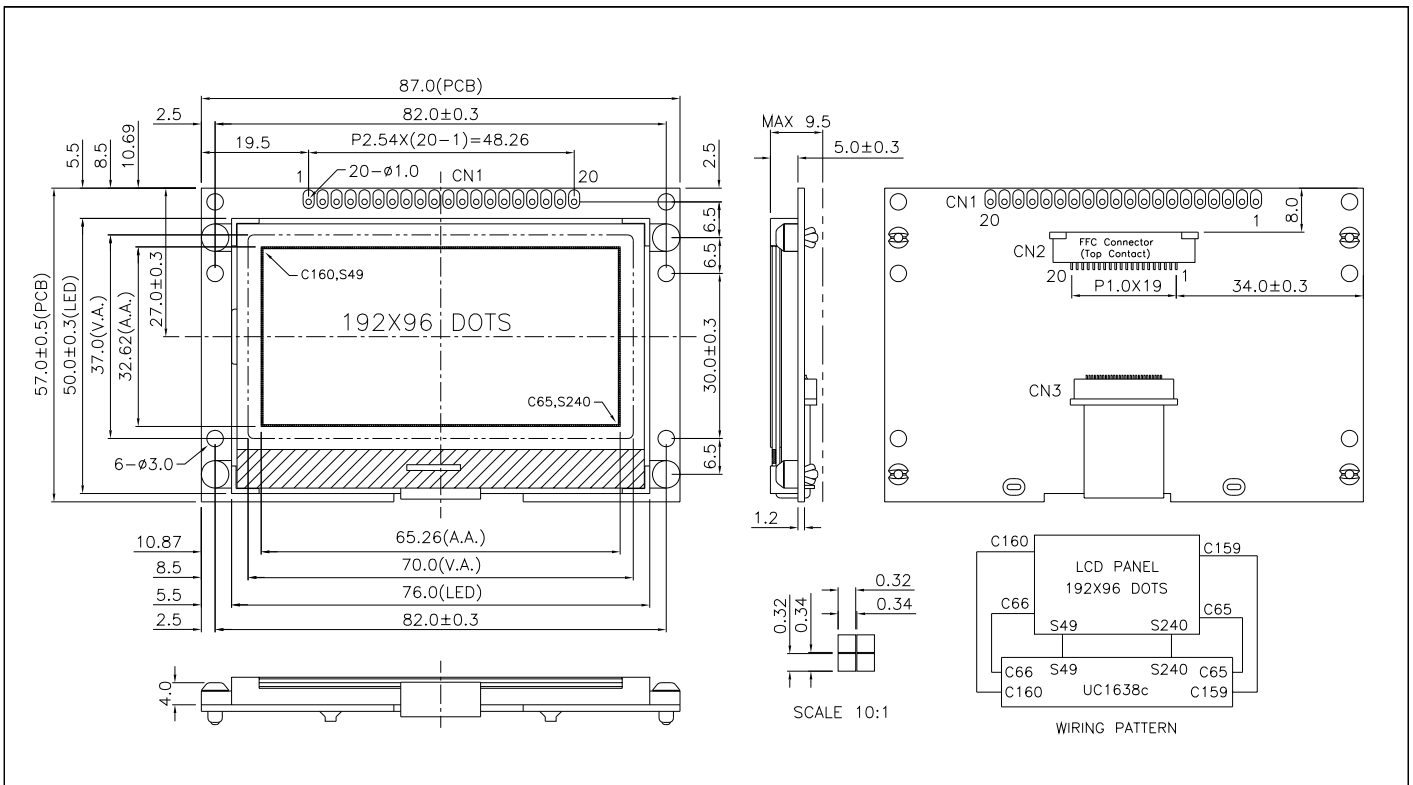


VS192962-DW-V33 192 x 96 dots + white led backlight, 8-bit parallel, SPI or I²C, 3.3V



ABSOLUTE MAXIMUM RATINGS

Item	Symbol	Min.	Max.	Unit
Supply Voltage(Logic)	V _{DD} - V _{SS}	-0.3	4.0	V
Supply Voltage(LCD)	V _{LCD} - V _{SS}	-0.3	19.8	V
Input Voltage	V _I	-0.3	V _{DD} + 0.3	V
Operating Temp.	T _{opr}	-20	70	°C
Storage Temp.	T _{stg}	-30	80	°C

MECHANICAL DATA

Item	Nominal Dimensions	Unit
Module Size (W x H x T)	87.0 x 57.0 x 9.5	mm
Viewing Area (W x H)	70.0 x 37.0	mm
Dot Pitch (W x H)	0.34 x 0.34	mm
Dot Size (W x H)	0.32 x 0.32	mm
Weight	Approx. 42	g

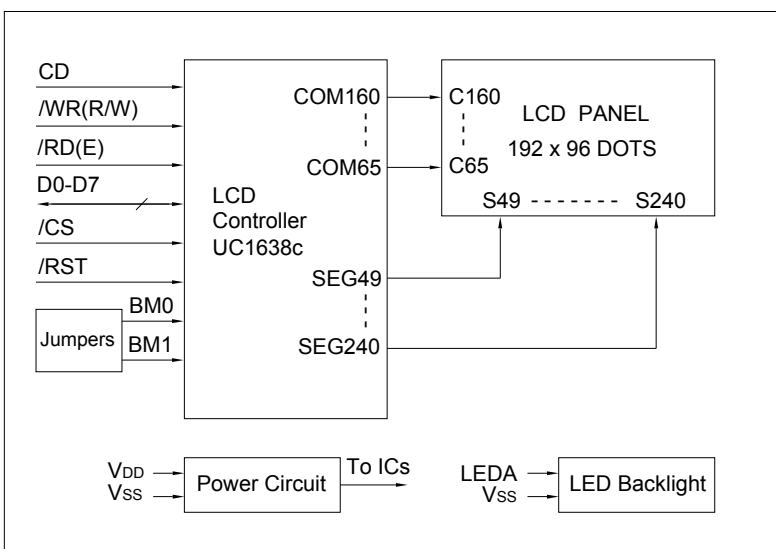
ELECTRICAL CHARACTERISTICS (V_{DD}=3.3V±0.3V)

Item	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Input High Voltage	V _{IH}	--	0.8V _{DD}	--	V _{DD}	V
Input Low Voltage	V _{IL}	--	0	--	0.2V _{DD}	V
Output High Voltage	V _{OH}	--	0.8V _{DD}	--	V _{DD}	V
Output Low Voltage	V _{OL}	--	0	--	0.2V _{DD}	V
Supply Current	I _{DD}	V _{DD} = 3.3V	--	0.9	1.4	mA
LCD Driving Voltage	V _{LCD} -V _{SS}	T _a =25°C	--	13.5	--	V

PIN CONNECTIONS (CN1/CN2)

Pin	Symbol	Level	Function
1	V _{SS}	0V	GND
2	V _{DD}	3.3V	Power supply for logic
3	LEDA	3.3V	Power supply for LED backlight LEDK is connected to V _{SS} on PCB
4	CD	H/L	CD="H": Display data CD="L": Instruction code
5	/CS	L	Chip selection signal. Active "L".
6	/RST	L	Reset signal. Active "L".
7	D0(SCK)	H/L	For parallel mode: D0 to D7 are 8-bit bidirectional data bus.
8	D1	H/L	
9	D2	H/L	
10	D3(SDAI)	H/L	For serial mode: D0 is serial clock input (SCK). D3 is serial data input (SDAI). D4, D5 is serial data output (SDAO).
11	D4(SDAO)	H/L	
12	D5(SDAO)	H/L	
13	D6	H/L	
14	D7	H/L	
15	/WR	L	Write signal. Active "L"
16	/RD	L	Read signal. Active "L"
17-20	NC	--	No connection

BLOCK DIAGRAM



LED BACKLIGHT SPECIFICATIONS (T_a=25°C)

Item	Symbol	Typ.	Max.	Unit
Forward Voltage	V _f	3.0	3.2	V
Forward Current	I _f	40	--	mA
LED Color		White		