LCD / LCM SPECIFICATION



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SPECIFICATION

MODULE NO.: WO32032-88IA#FC

General Specification

Item	Dimension	Unit
Number of dots	320 x 32	—
Module dimension	114.32 x 27.56 x 5.6	mm
View area	109.12 x 15.26	mm
Active area	106.865 x 12.85	mm
Dot size	0.319 x 0.388	mm
Dot pitch	0.334 x 0.402	mm
Drive Method	1/32Duty,1/9 Bias	
Backlight Type	LED, White	
IC	ST7586S	
Interface	3-Line SPI/ 4-Line SPI	

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Absolute Maximum Ratings

Item	Symbol	Min	Typ	Max	Unit
Operating Temperature	T_{OP}	-20	—	+70	℃
Storage Temperature	T_{ST}	-30	—	+80	℃
Digital Power Supply Voltage	VDDI	-0.3	—	3.6	V
LCD Power supply voltage	V0-XV0	-0.3	—	19.0	V
Input Voltage	VIN	-0.3	—	VDDI+0.3	V

Electrical Characteristics

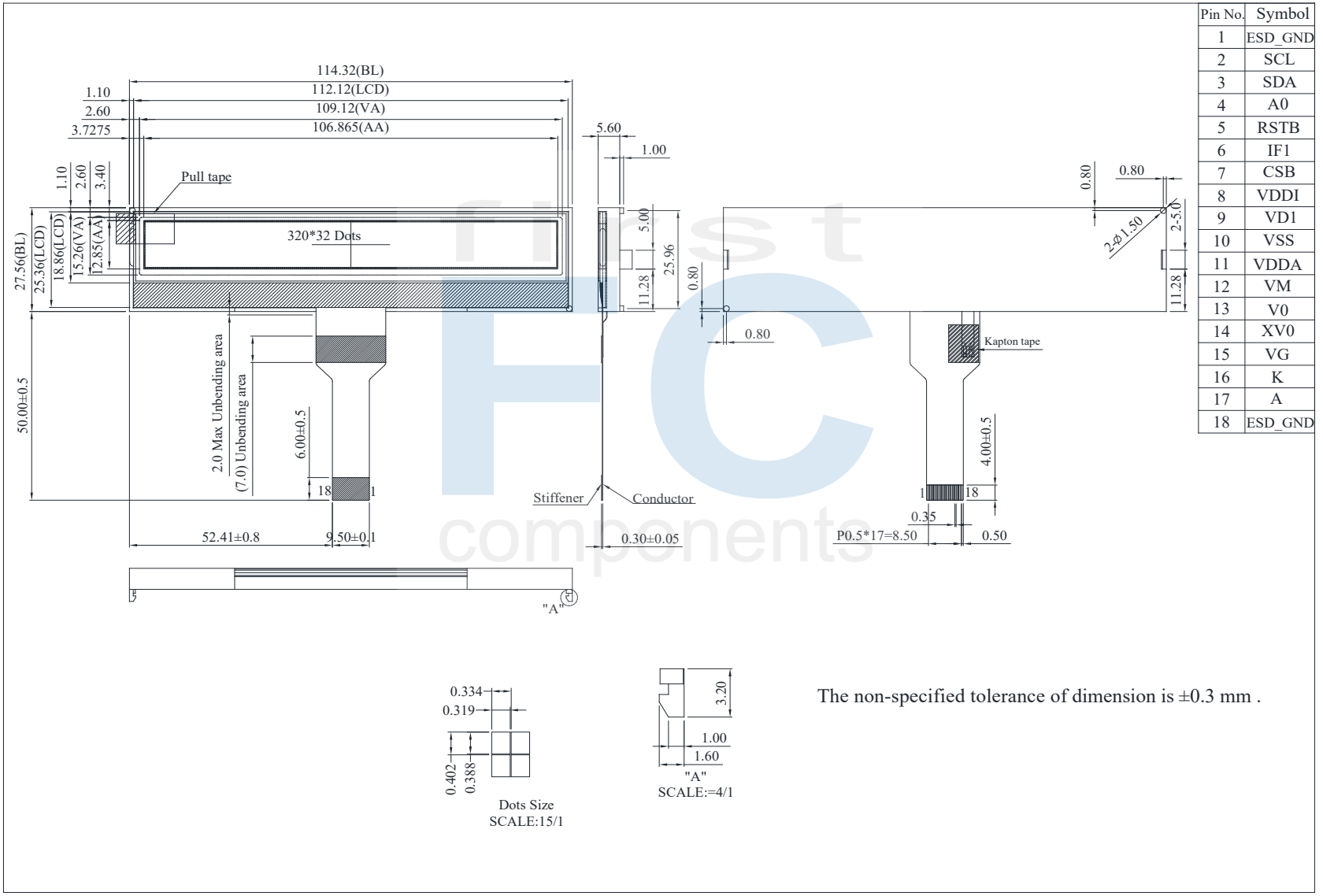
Item	Symbol	Condition	Min	Typ	Max	Unit
Digital Operating Voltage	V_{DDI}-V_{SS}	—	2.7	3.0	3.3	V
Analog Operating Voltage	V_{DDA}-V_{SS}	—	2.7	3.0	3.3	
Supply Voltage For LCM	V0-XV0	Ta=-20℃ Ta=25℃ Ta=70℃	— 9.8 —	— 10.0 —	— 10.2 —	V V V
Input High Volt.	V_{IH}	—	0.7 V_{DD}	—	V_{DD}	V
Input Low Volt.	V_{IL}	—	V_{SS}	—	0.3 V_{DD}	V
Output High Volt.	V_{OH}	—	0.8 V_{DD}	—	V_{DD}	V
Output Low Volt.	V_{OL}	—	V_{SS}	—	0.2 V_{DD}	V
Supply LCM Current	I_{DD}	V_{DD}=3.0V	—	1.1	2.0	mA

Interface Pin Function

Pin No.	Symbol	Function Description
1	ESD_GND	ESD_Ground
2	SCL	Serial clock line
3	SDA	Serial data line
4	A0	The function of this pin is different in parallel and serial interface. In serial interface: this pad will be used as SCL (serial-clock) input
5	RSTB	Reset input pin
6	IF1	These pins select interface operation mode. **IF1** / **MPU interface type** H / 4-Line L / 3-Line
7	CSB	Chip select input pin
8	VDDI	Power supply for Digital Operating Voltage
9	VD1	VD1I is the power source of digital circuits.
10	VSS	Ground
1	VDDA	Power supply for Analog Operating Voltage
12	VM	VM is the power of SEG-drivers
13	V0	Positive operating voltage of COM-drivers.
14	XV0	Negative operating voltage of COM-drivers.
15	VG	VG is the power of SEG-drivers
16	K	LED-
17	A	LED+
18	ESD_GND	ESD_Ground

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Contour Drawing & Block Diagram



Pin No.	Symbol
1	ESD_GND
2	SCL
3	SDA
4	A0
5	RSTB
6	IF1
7	CSB
8	VDDI
9	VD1
10	VSS
11	VDDA
12	VM
13	V0
14	XV0
15	VG
16	K
17	A
18	ESD_GND

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

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