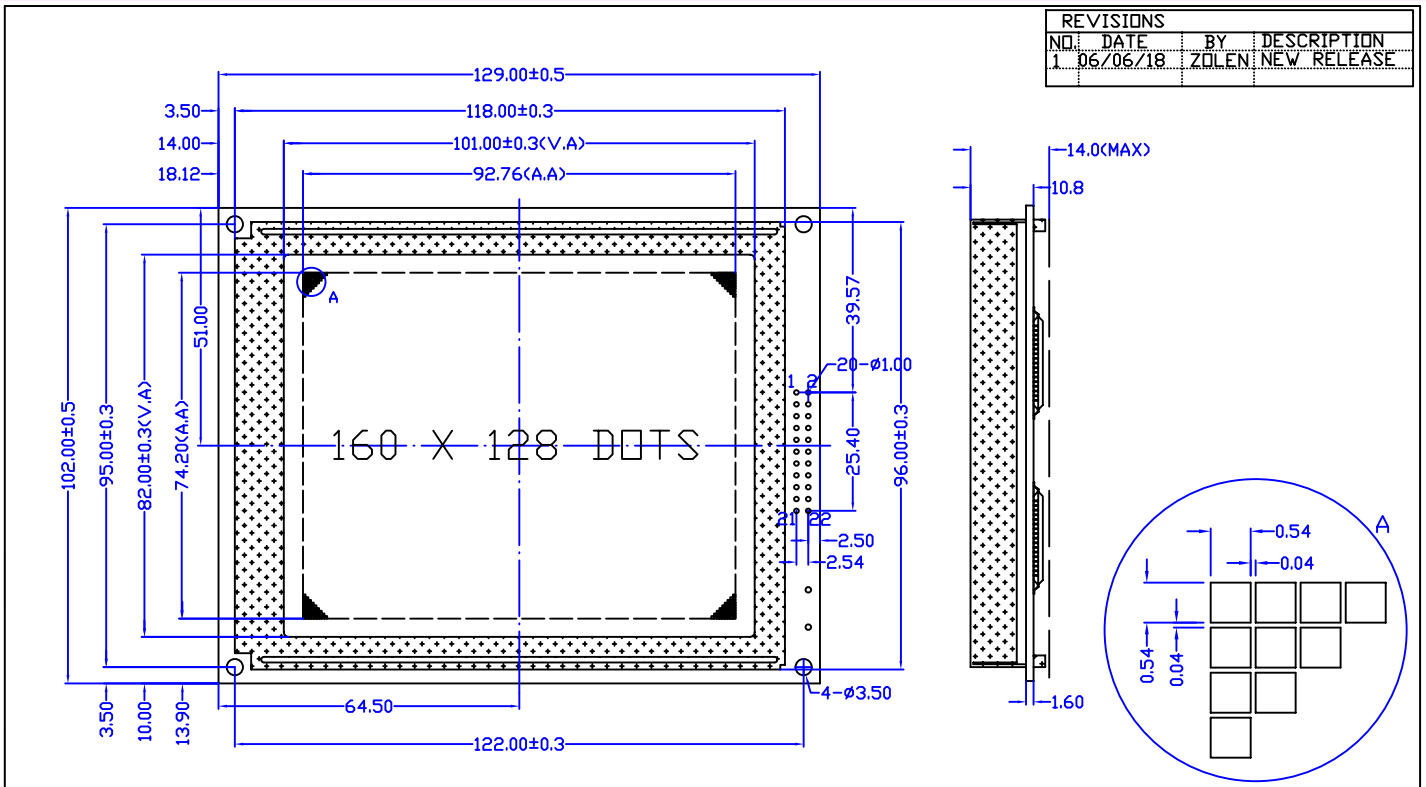


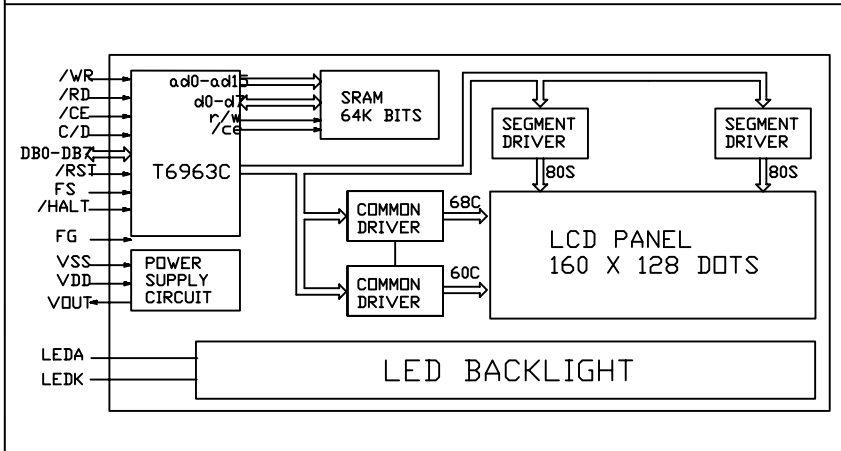
CUSTOMER'S APPROVED:

DATE:

REVISIONS			
NO.	DATE	BY	DESCRIPTION
1.	06/06/18	ZOLEN	NEW RELEASE



Block Diagram



Feature

1. BUILT IN CONTROLLER: T6963C OR EQUIVALENT
2. POWER SUPPLY: 5.0V
3. LCD TYPE: BLUE STN, TRANSMISSIVE
4. BACKLIGHT: LED SIDE BACKLIGHT
5. COLOUR OF BACKLIGHT: WHITE
6. 1/128 DUTY CYCLE, 1/12 BIAS
7. VIEWING ANGLE: 6 O'CLOCK
8. TEMPERATURE RANGE: EXTENDED(-20--70)
9. LOW CONSUMPTION, LOW VOLTAGE, HIGH CONTRAST

Mechanical Data

ITEM	SPECIFICATION	UNIT
OVERALL SIZE	129.0W x 102.0H x 14.0T	MM
VIEWING AREA	101.0W x 82.0H	MM
DOT NUMBER	160 x 128	DOTS
DOT SIZE	0.54W x 0.54H	MM
DOT PITCH	0.58W x 0.58H	MM

Pin Assignment

NO.	SYMBOL	DESCRIPTION
1	FG	FRAME GROUND
2	VSS	GROUND
3	VDD	POWER SUPPLY FOR LOGIC AND LCD
4	V0	OPERATING VOLTAGE FOR LCD
5	VOUT	NEGATIVE VOLTAGE INPUT/OUTPUT
6	/WR	DATA WRITE
7	/RD	DATA READ
8	/CE	CHIP ENABLE FOR T6963C
9	C/D	COMMAND/DATA SELECTION
10	HALT	CLOCK OPERATING STOP SIGNAL
11	/RST	RESET T6963C (LOW EFFECTIVE)
12--19	DB0--DB7	DATA BUS
20	NC	NO CONNECTION
21	A	LED BACKLIGHT POWER SUPPLY(+)(+5V)
22	K	LED BACKLIGHT POWER SUPPLY(-)(0V)

Absolute Maximum Rating

ITEM	SYMBOL	MIN	MAX	UNIT
POWER SUPPLY(LOGIC)	VDD-VSS	0	6.5	V
POWER SUPPLY(LCD DRV.)	VDD-V0	0	30.0	V
INPUT VOLTAGE	Vi	Vi	VDD	V

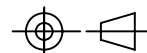
Electrical Characteristics

ITEM	SYMBOL	MIN	TYP	MAX	UNIT
VOLTAGE FOR LOGIC	VDD-VSS	4.75	5.0	5.25	V
SUPPLY CURRENT	IDD	-	12.0	-	mA
LCD OPERATING VOLTAGE	VDD-V0	0C	-	18.5	V
		25C	-	18.0	V
		40C	-	17.5	V
INPUT VOLTAGE	H	0.7VDD	-	VDD	V
	L	VIL	0	0.3VDD	V

DESCRIPTION: c/d

GENERAL TOL: ±0.2

DO NOT SCALE THIS DRAWING.



Unit:mm

Drw wxy

Chk

Apv

G160128A