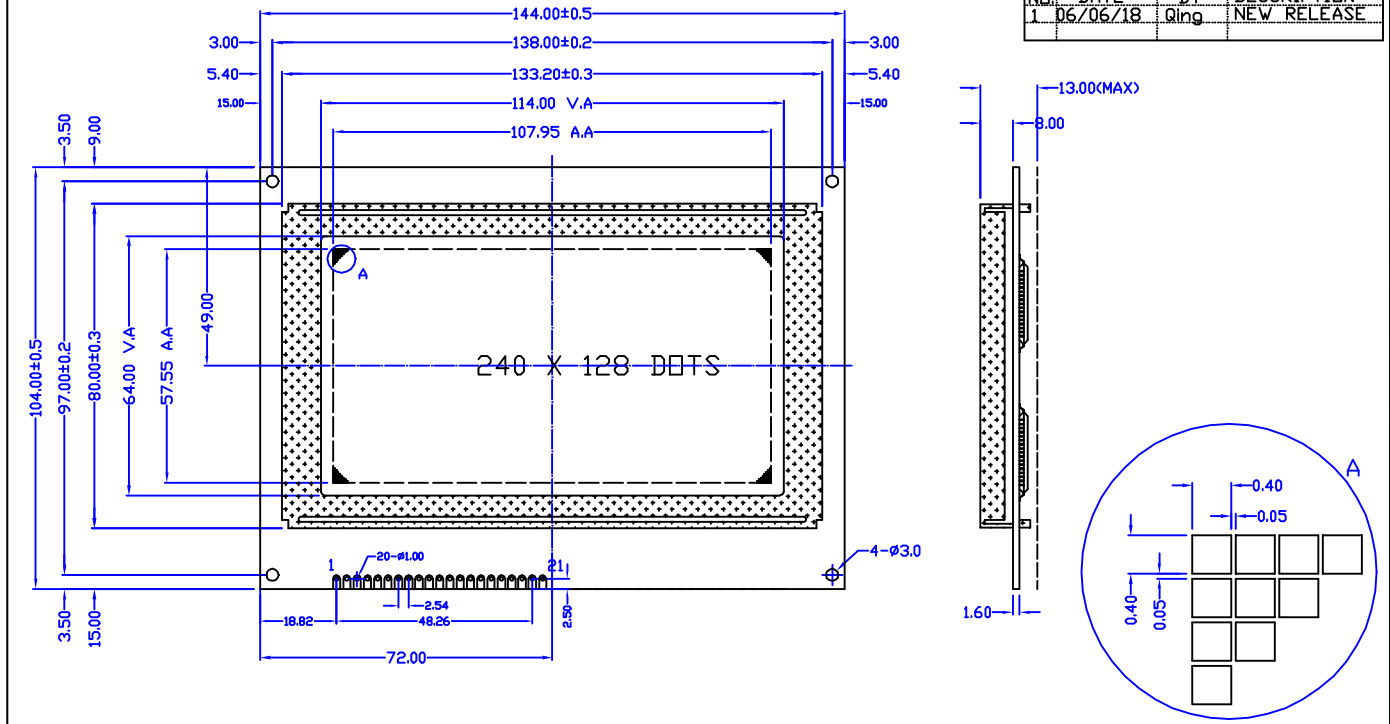


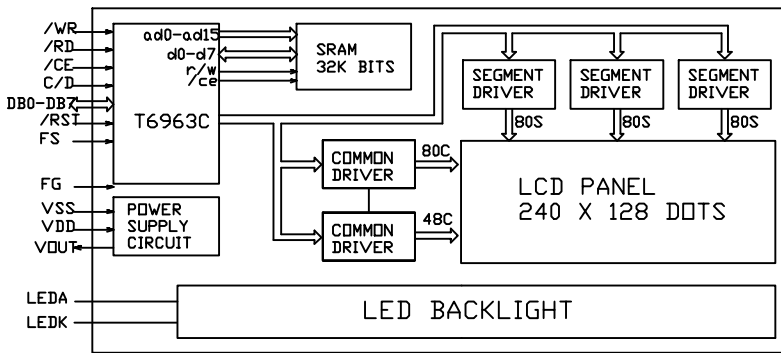
**CUSTOMER'S APPROVED:**

**DATE:**

REVISIONS			
NO.	DATE	BY	DESCRIPTION
1	06/06/18	Qing	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	144.0W x 104.0H x 14.0T	MM
VIEWING AREA	133.2W x 64.0H	MM
DOT NUMBER	240 x 128	DOTS
DOT SIZE	0.40W x 0.40H	MM
DOT PITCH	0.45W x 0.45H	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	/WR	DATA WRITE
6	/RD	DATA READ
7	/CE	CHIP ENABLE FOR T6963C
8	C/D	COMMAND/DATA SELECTION
9	/RST	RESET T6963C (LOW EFFECTIVE)
10--17	DB0--DB7	DATA BUS
18	FS	FONT SELECTION (L:8X8, H:6X8)
19	VOUT	NEGATIVE VOLTAGE INPUT/OUTPUT
20	LEDA	LED BACKLIGHT POWER SUPPLY(+)
21	LEDK	LED BACKLIGHT POWER SUPPLY(-)

**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	-	19.0	-
		25C	-	18.5	-
		40C	-	18.0	-
INPUT VOLTAGE	H	VIH	0.7VDD	-	VDD
	L	VIL	0	-	0.3VDD

DESCRIPTION: C/D	Distar Technology Limited	
GENERAL TOL: ±0.2	www.distarltd.com	Drw WXR
DO NOT SCALE THIS DRAWING.	Unit:mm	Chk Apv

DS-G240128A-BTSSWE-YAA