



Advanced Display Solutions Specialist

PART NO.: AG043EN-N03N-CTG-V1

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# CONTENTS

<b>1. ORDERING INFORMATION</b> .....	01
1.1 Part Number .....	01
1.2 Contact Info .....	01
<b>2. SPECIFICATION</b> .....	03
2.1 Display Specification .....	03
2.2 Mechanical Specification .....	03
2.3 Electrical Specification .....	03
2.4 Optical Specification .....	03
<b>3. OUTLINE DRAWING</b> .....	04
<b>4. ELECTRICAL SPEC</b> .....	05
4.1 Pin Configuration .....	05
4.2 Absolute Maximum Ratings .....	06
4.3 Electrical Characteristics .....	06

**Description:**

4.3" Dual mode Class A or B Filtered NVIS backlight, RGB active matrix TFT module AG043EN-N03N-CTG-V1. Features 480 x 272 resolution, 345 cd/m2 LED backlight for day mode, 400:1 contrast ratio. Adjoined multi-touch capacitive touch screen. Operational temperature of -20 / 70°C.

\*NVIS mode consist of an independent backlight system.

\*LCD available without touchscreen; 375 cd/m2 daylight luminance.

## 2. SPECIFICATION

### 2.1 Display Specification

ITEM	STANDARD VALUE	UNIT
Display Format	480 (RGB) x 272 Dots	--
Display Connector	FPC-Connector	--
FPC Connector	40 Pin,0.5mm Pitch, SMD Horizontal Type Top Contact	--
Operating Temperature	-20 ~ +70	°C
Storage Temperature	-30 ~ +80	°C
Touch Panel Optional	Yes	--
Sunlight Readable	No	--

### 2.2 Mechanical Specification

ITEM	STANDARD VALUE	UNIT
Diagonal Size	4.3"	inch
Outline Dimension with FPC Folded	105.4(W) x67.1 (H)	mm
Active Area	95.04 (W) x 53.856(H)	mm
Pixel Pitch	0.198(W) x 0.198(H)	mm
Gross Weight	127	g

### 2.3 Electrical Specification

ITEM	STANDARD VALUE	UNIT
IC Package	COG	--
Driver	NV3047 equivalent with HX8257	--
Interface	RGB Interface	--
Response Time (Typ)	15	ms

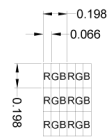
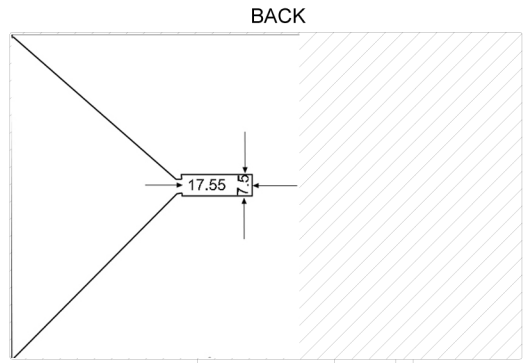
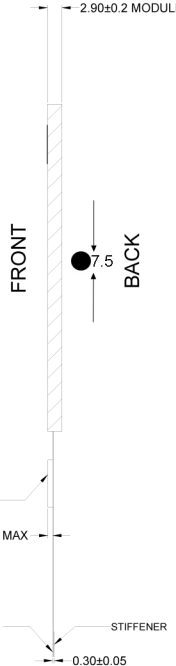
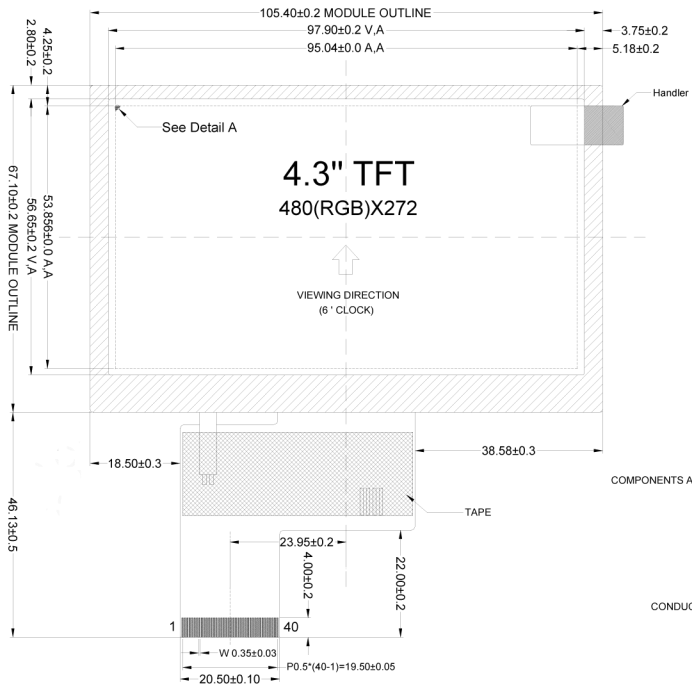
### 2.4 Optical Specification

ITEM	STANDARD VALUE	UNIT
LCD Type	TFT-LCD / Transmissive / Positive	--
Viewing Angle Range	Left:70, Right:70, Up:50, Down:50	deg
Colors	65K/262K/16.7M	--
Contrast Ratio (Typ)	400:1	--
Brightness (Typ)	340	cd/m2
NVIS Color (Filter)	Class A or Class B	--

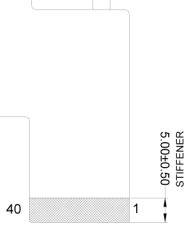
3. OUTLINE DRAWING

REV	DESCRIPTION	DESIGN	DATE

Customer Approved by:



Pixels Details  
Scale: 25:1



APPROVALS		DATE	MODEL NUMBER :	GENERAL TOL.	UNITS
APP			AG043EN-N03N-CTG-V1		MM
CHK				VERSION	
DWN			SCALE 1:1	PROJECTION	SHEET: 1

## 4. ELECTRICAL SPEC

### 4.1 Pin Configuration

Pin No	Pin Name	Descriptions
1	VLED-	LED Cathode
2	VLED+	LED Anode
3	GND	Ground
4	VDD	Power Supply
5-12	R0~R7	Red Data
13-20	G0~G7	Green Data
21-28	B0~B7	Blue Data
29	GND	Ground
30	PCLK	Clock
31	DISP	Disp="on" when pin 31 is connected with high-level. Disp="off" when pin 31 is connected with low-level.
32	HSYNC	Horizontal sync input in RGB mode. (Short to GND if not used)
33	VSYNC	Vertical sync input in RGB mode. (Short to GND if not used)
34	DE	Data Enable
35	NC	NC
36	GND	Ground
37	XR	X_ Right (This pin is used for resistive touch panel and active when the fpc of touch panel is connected with the fpc of display, otherwise it's no connection)
38	YD	Y_ Down (This pin is used for resistive touch panel and active when the fpc of touch panel is connected with the fpc of display, otherwise it's no connection)
39	XL	X_ Left (This pin is used for resistive touch panel and active when the fpc of touch panel is connected with the fpc of display, otherwise it's no connection)
40	YU	Y_ Up (This pin is used for resistive touch panel and active when the fpc of touch panel is connected with the fpc of display, otherwise it's no connection)

#### 4.2 Absolute Maximum Ratings

ITEM	SYMBOL	MIN.	TYP.	MAX.	UNIT
Power Supply Voltage	VCC	-0.3	-	4	V
Operating Temperature	Top	-20	-	70	°C
Storage Temperature	TST	-30	-	80	°C
Humidity	RH	-		90%(Max60°C)	RH

#### 4.3 Electrical Characteristics

ITEM	SYMBOL	MIN.	TYP.	MAX.	UNIT
Power supply voltage	VCC	3	3.3	3.6	V
Input Voltage 'H' Level	VIH	0.7VDD	-	VDD	V
Input Voltage 'L' Level	VIL	VSS	-	0.3VDD	V
Backlight Forward Voltage	VLED	-	25	-	V
Backlight Current	ILED	-	15	-	mA
NVIS Backlight Forward Voltage	NVLED	-	3.3	-	V
NVIS Backlight Current	NILED	-	30	-	mA