9“W WQVGA 640x234
Promotion Material

HSD090ICW1-A
IF: Analog
Outline : 210.7x126.4x6.6 mm

Product Characteristics

❑ Product Position :

- 9”W Analog for Portable DVD Player Application
- 9”W Analog for Digital Photo Frame Application
- High Performance Design
- Analog Interface

❑ Better Optical Performance:

- Wide Viewing Angle: 140/130
- Contrast Ratio: 500:1
- Brightness: 250nits
- Response time: 25ms (Tr + Tf)

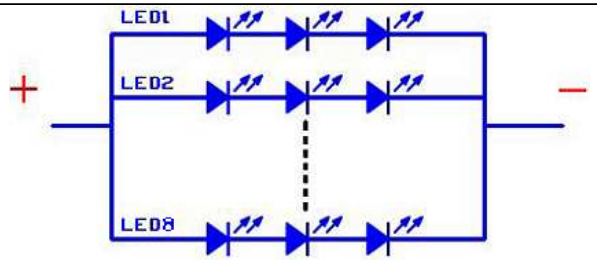
❑ Product Development Schedule:

MP ready

General Specification

Items	HSD090ICW1-A	Notes
Display	9" wide	
Resolution	640 RGB (H) × 234(V)	
Active Area (mm)	197.76(H) x 111.735(V)	
Driver Element	a-Si TFT	
Pixel Arrangement	RGB vertical stripe	
Dot Pitch (mm)	0.309(H) x 0.4775(V)	
Display Mode	Normally white	TN
Surface Treatment	Antiglare	
Display Colors	Full Color	

Mechanical Specification

Items	HSD090ICW1-A	Notes
Outline	210.7 x 126.4	typ
Thickness (mm)	6.6 (typ)	typ
Weight (g)	273	typ
Assembly	Side mount	
Bezel Open (mm)		
LED	24 LEDs	MDL 250nits
LED Conn.	BHSR-02VS-1/JST x 1	Or equivalent, Locking type
LED Cable Length (mm)	131.8 +/-5	
Notes	 BHSR-02VS-1/JST or equivalent	

Electrical Specification

Items	HSD090ICW1-A	Notes
TFT LCD		
Power Supply Voltage	3.3V power input	
Back-light Unit		
LED Current	20mA for one series	8 series
Operating Life Time	20,000hrs	Min.
Signal System		
Interface	Analog	FPC
Driving Method	2 Level Driving	

Optical Specification

Items	HSD090ICW1-A	Notes
Luminance	250nits	Center
Contrast Ratio	500:1	
Brightness Uniformity	70%(min)	9points, VESA Standard
Response Time	25ms (typ)	Tr+Tf
View Angle R/L/U/D	$70^0/70^0/65^0/65^0$(typ)	CR>10
Color Coordinate	Wx:0.31, Wy:0.33	
Color Depth	Full Color	

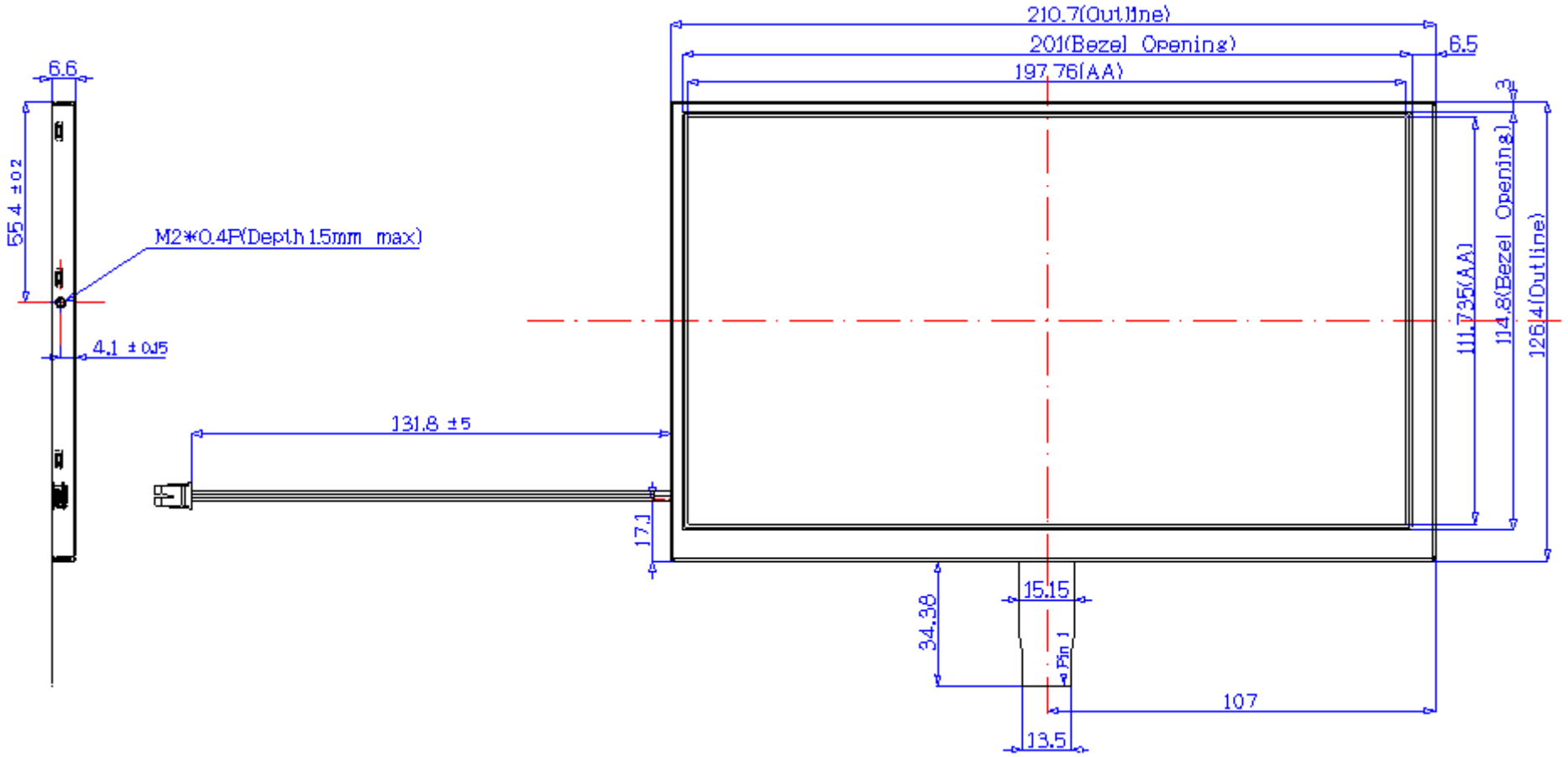
Interface Pin Assignment

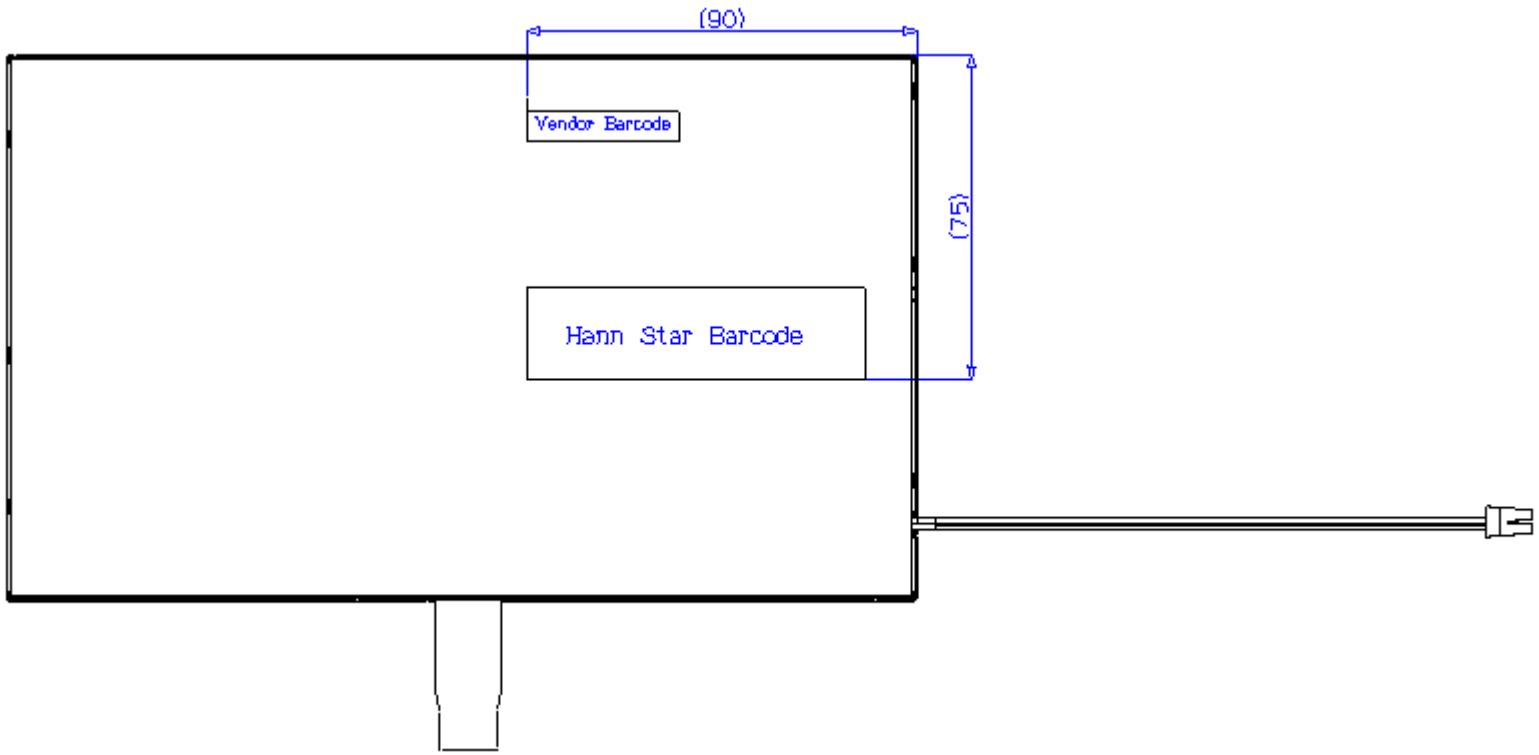
Interface Pin Assignment:

Pin No.	Signal	I/O	Description	Note
1	GND	-	GND for Logic Circuit	
2	VCC	I	Logic Power for Gate Driver	
3	VGL	I	Negative Power for Gate Driver	
4	VGH	I	Positive Power for Gate Driver	
5	STVD	I/O	Vertical Start Pulse	(1)
6	STVU	I/O	Vertical Start Pulse	(1)
7	CKV	I	Shift CLK Input for Gate Driver	
8	U/D	I	UP/Down Scan Setting	(1)
9	OEV	I	Output Enable Input for Gate Driver	
10	VCOM	I	Common Electrode Driving Signal	
11	VCOM	I	Common Electrode Driving Signal	
12	L/R	I	Left/Right Shift Setting	(1)
13	MOD	I	Sequential or Simultaneous Sampling Setting	(2)
14	OEH	I	Output Enable Input for Source Driver	
15	STHL	I/O	Horizontal Start Pulse	(1)
16	STHR	I/O	Horizontal Start Pulse	(1)
17	CPH3	I	Sampling and Shifting CLK Pulse	(2)
18	CPH2	I	Sampling and Shifting CLK Pulse	(2)
19	CPH1	I	Sampling and Shifting CLK Pulse	
20	VCC	I	Logic Power for Source Driver	
21	GND	-	GND for Logic Circuit	
22	VR	I	Alternated Video Input, R	
23	VG	I	Alternated Video Input, G	
24	VB	I	Alternated Video Input, B	
25	AVDD	I	Supply Voltage for Analog Circuit	
26	AVSS	-	GND for Analog Circuit	

Mechanical Drawing…Front View

Front View



Mechanical Drawing…Back View

Back View