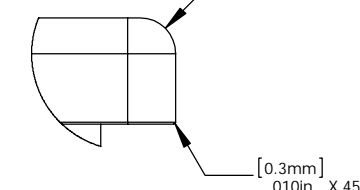
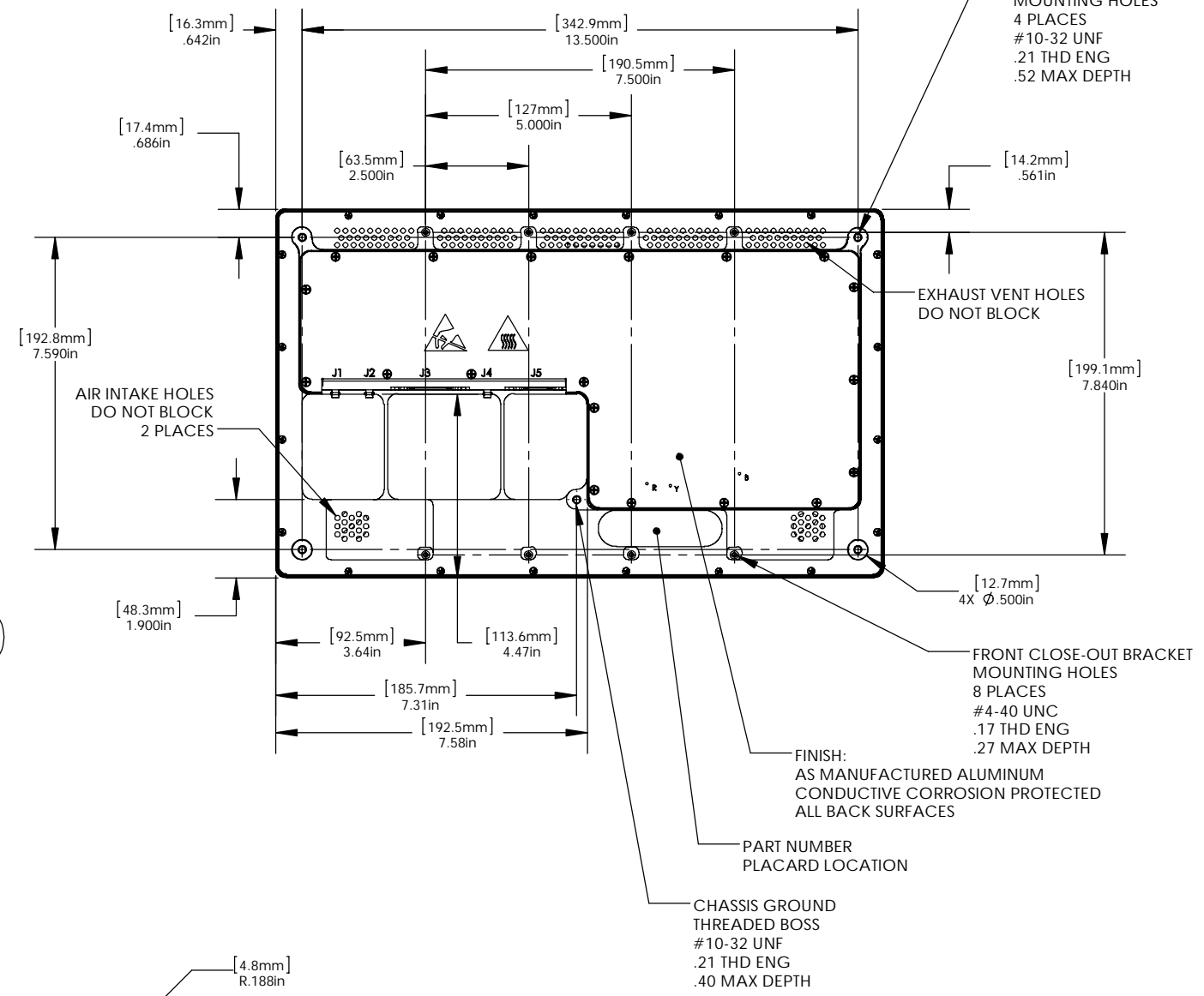
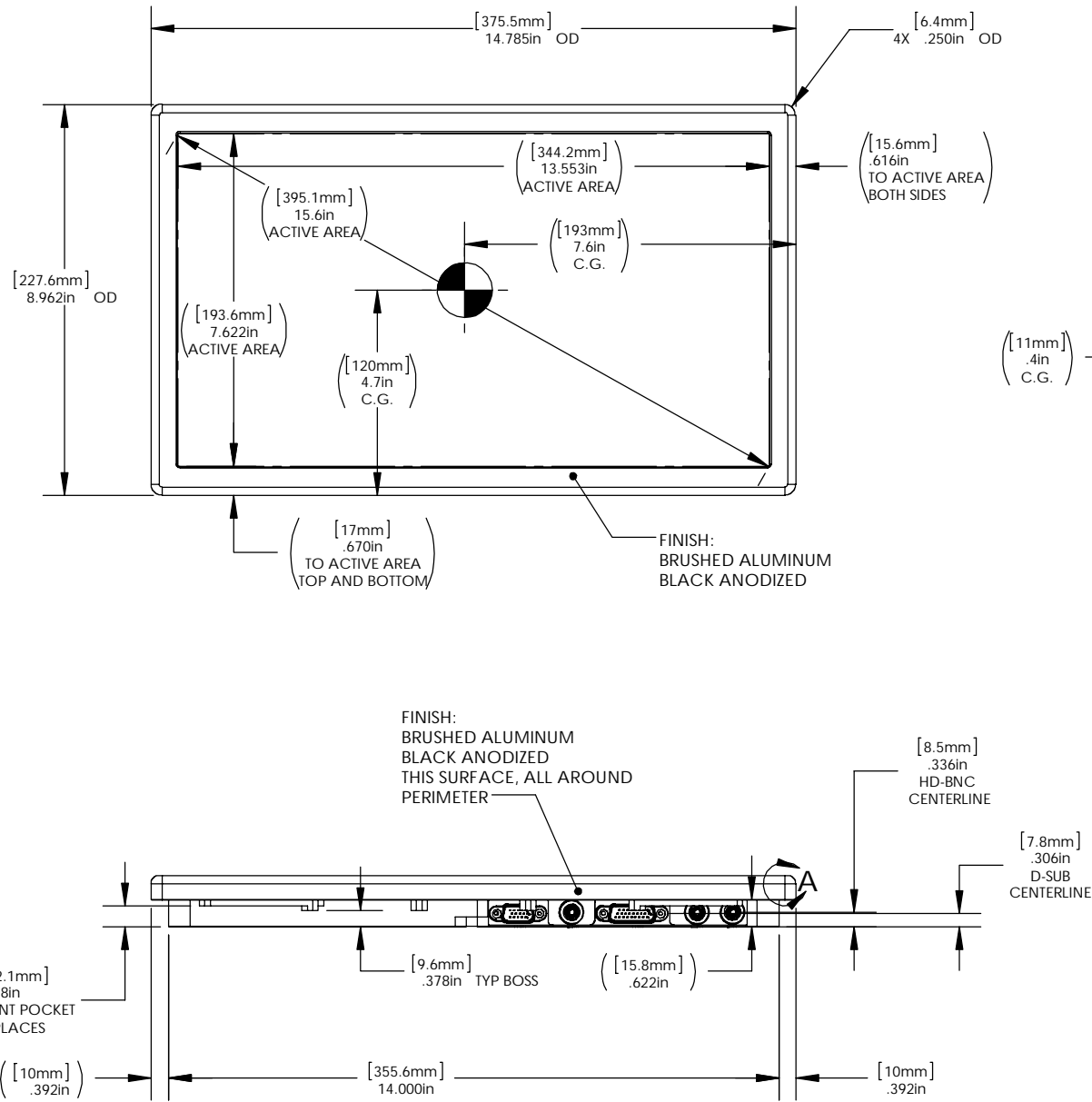


NOTES: (UNLESS OTHERWISE SPECIFIED)

1. ASSEMBLY WEIGHT 5.5 LBS MAX
2. OBSERVE ESD SAFE HANDLING PRACTICES PER ANSI / ESD 520.20
3. SOME MINOR PARTS, LABELS, AND INSTRUCTIONS OMITTED FOR CLARITY
4. VENTING / CLEARANCE: NATURAL CONVECTION, CLEARANCE TO BACK OF UNIT 3/8"
5. MINIMUM (4) FASTENERS REQUIRED FOR MOUNTING
6. CONNECTOR KITS NOT INCLUDED
7. SEE QUALITY CONTROL PLAN, IF APPLICABLE, FOR ANY CRITICAL ITEMS, SPECIAL PROCESSES, OR KEY CHARACTERISTICS THAT MAY EXIST
8. METRIC DIMENSIONS ARE FOR REFERENCE ONLY

Electronic Revision Controlled

REVISIONS						
ZONE	REV	DESCRIPTION	DATE	BY	EC NO	APRV
SH2	5.0	CORRECT NOTE 5 TYPO, UPDATED PERFORMANCE DATA TABLE	10/23/17	MCS	NEC17-0638	BEF
	A	INITIAL PRODUCTION RELEASE, UPDATED SOME DIMENSION TOLERANCES, MADE OTHERS REFERENCE, ADDED "****" NOTE TO SUPPORTED VIDEO	02/23/18	MCS	18-0130	
SH2	B	UPD NOTE AUDIO OUTPUT LINE OUT, WAS 2V P-P	03/15/18	MCS	18-0175	SC



THE INFORMATION CONTAINED HEREIN IS PROPRIETARY TO ROSEN AVIATION, LLC. IT SHALL NOT BE REPRODUCED OR DISCLOSED IN WHOLE OR IN PART OR USED FOR ANY DESIGN OR MANUFACTURE EXCEPT WHEN SUCH USER POSSESSES DIRECT, WRITTEN AUTHORIZATION FROM ROSEN AVIATION, LLC. THIS DRAWING MAY BE COVERED UNDER ONE OR MORE U.S. OR INTERNATIONAL PATENTS. PLEASE CONTACT ROSEN AVIATION FOR SPECIFIC INFORMATION.

ROSEN AVIATION 1020 OWEN LOOP SOUTH EUGENE, OREGON 97402 TEL: (541) 342-3802 FAX: (541) 342-4912	APPROVALS	INITIAL	DATE
	DRAWN BY	MCS	04/11/17
	CHECKER	SC	02/22/18
	ENGINEER	MCS	02/22/18
TITLE: OUTLINE AND INSTALLATION DRAWING, 15.6" SMART DISPLAY MODULE			SDM156-001-CD
FIRST CALLED FOR: (FCF)			SIZE: B
361 - 15.6 SDM			REV: B
SCALE: 1:4			SHEET 1 OF 2

PERFORMANCE SPECIFICATIONS (REF)

LCD Performance	
Screen Resolution (pixels)	1920 x 1080
Display Viewing Area (mm)	344.16mm X 193.59mm
Horizontal Viewing Angle	±85°
Vertical Viewing Angle	±85°
Contrast Ratio (Typical)	1500:1
Screen Brightness (Typical)	400 cd/m ²

Power Requirements

Operational Voltage Range	18 to 32 VDC
Max Current at Nominal Voltage*	1.1 Amps @ 28VDC
Inrush Peak	4.9 Amps
Inrush Duration	1 ms

Environmental Specifications

Operating Temperature	-15°C - 55°C
Altitude	15,000ft
Humidity	95%RH
Vibration	DO-160G Cat S (Curve B)
Emission of RF Energy	DO-160G Cat M

Supported Video Resolutions***

480i@29.97	1080P@23.97
576i@25	1080P@24
720p@50	1080P@25
720P@59.94	1080P@29.97
720P@60	1080P@30
1080i@25	1080P@50
1080i@29.97	1080P@59.94
1080i@30	1080P@60

* Current Draw will increase as voltage decreases

** Audio output is Line Level (2V-RMS) but can be adjusted. See Tech Manual for details.

***Supported video resolutions include both standard SDI and SDI Scramble Protocol

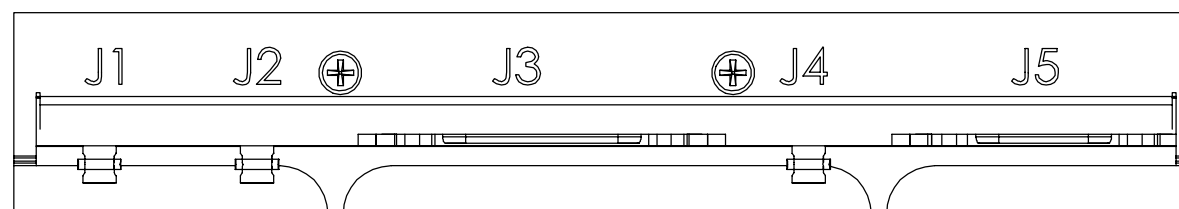
J1	
SDI ***	
LRU CONNECTOR	
HD-BNC, JACK	
SUGGESTED MATE HARDWARE	
TYPE	HDBNC
MATE	AMP - 034-1042
IMPEDANCE	75-Ohms
PIN	FUNCTION
CENTER	3G-SDI
OUTER	3G-SDI RETURN

J2	
SDI ***	
LRU CONNECTOR	
HD-BNC, JACK	
SUGGESTED MATE HARDWARE	
TYPE	HDBNC
MATE	AMP - 034-1042
IMPEDANCE	75-Ohms
PIN	FUNCTION
CENTER	3G-SDI
OUTER	3G-SDI RETURN

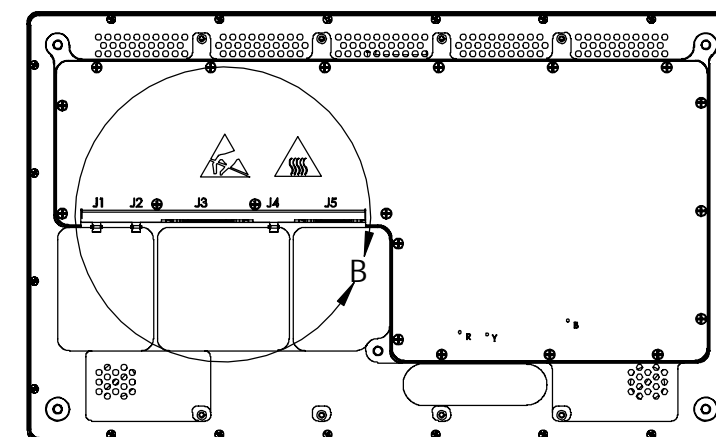
J3	
MAIN CONNECTOR	
LRU CONNECTOR	
26 POS. DSUB-HD, MALE PINS	
SUGGESTED MATE HARDWARE	
HOUSING	AMP - 1658682-1
CONTACT	AMP - 1658686-1
SHELL	3M - 3357-9215
Pin	Signal
1	Return 28 VDC
2	28 VDC In
3	Chassis GND
4	Analog Audio Return**
5	Analog Audio out Left**
6	Analog Audio out Right**
7	RS232 Control TX
8	RS232 Control RX
9	Signal GND
10	ARINC-429 in 1 A
11	ARINC-429 in 1 B
12	ARINC-429 in 2 A
13	ARINC-429 in 2 B
14	RS232 GPS TX
15	RS232 GPS RX
16	Signal GND
17	USB GND
18	Pwr Control in
19	Select in
20	Discrete out / Extra in
21	Audio Mute Control in
22	RS485+
23	RS485-
24	USB VBUS
25	USB D+
26	USB D-

J4	
COMPOSITE	
LRU CONNECTOR	
HD-BNC, JACK	
SUGGESTED MATE HARDWARE	
TYPE	HDBNC
MATE	AMP - 034-1042
IMPEDANCE	75-Ohms
PIN	FUNCTION
CENTER	VIDEO SIGNAL
OUTER	VIDEO RETURN

J5	
ETHERNET	
LRU CONNECTOR	
15 POS. DSUB-HD, MALE PINS	
SUGGESTED MATE HARDWARE	
HOUSING	AMP - 1658681-1
CONTACT	AMP - 1658686-1
SHELL	3M - 3357-9209
Pin	Signal
1	ENET C+
2	CHASSIS GND
3	ENET B- (RX-)
4	ENET A- (TX-)
5	ENET D-
6	CHASSIS GND
7	ENET C-
8	ENET B+ (RX+)
9	ENET A+ (TX+)
10	ENET D+
11	IR in
12	IR +5V out
13	Signal GND
14	RS232 Debug TX
15	RS232 Debug RX



DETAIL B
SCALE 1:1



THE INFORMATION CONTAINED HEREIN IS PROPRIETARY TO ROSEN AVIATION, LLC. IT SHALL NOT BE REPRODUCED OR DISCLOSED IN WHOLE OR IN PART OR USED FOR ANY DESIGN OR MANUFACTURE EXCEPT WHEN SUCH USER POSSESSES DIRECT WRITTEN AUTHORIZATION FROM ROSEN AVIATION, LLC. THIS DRAWING MAY BE COVERED UNDER ONE OR MORE U.S. OR INTERNATIONAL PATENTS. PLEASE CONTACT ROSEN AVIATION FOR SPECIFIC INFORMATION.

ROSEN AVIATION

1020 OWEN LOOP SOUTH
EUGENE, OREGON 97402
TEL: (541) 342-3802 FAX: (541) 342-4912

SIZE	SDM156-001-CD	REV
B		B1
SCALE: 1:4	SHEET 2 OF 2	