

	NAME	DATE
DRAWN	Joe S.	2017-10-05
CHECKED	--	
ENG APPR.	--	
MFG APPR.	--	

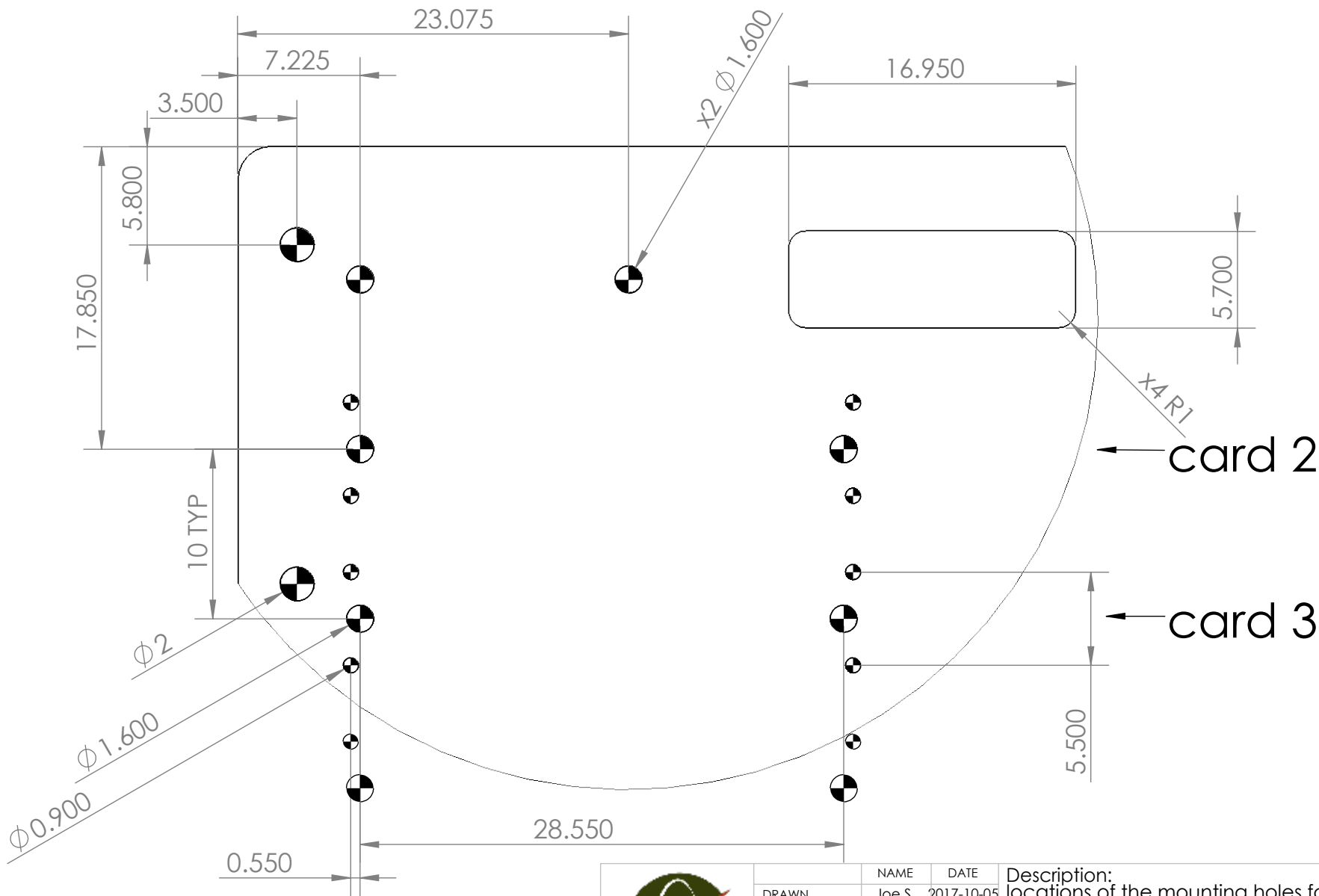
Description:
The backplane which connects the various cards in OreSat

UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE IN MILLIMETERS
TOLERANCES:
FRACTIONAL: 1/32
ANGULAR: MACH ± BEND ±
TWO PLACE DECIMAL ±.01
THREE PLACE DECIMAL ±.001

MATERIAL	FR4
FINISH	--
Weight	
DO NOT SCALE DRAWING	

Table of Contents:	1 -- overview 2 -- DETAIL A (-Y, +Z holes) 3 -- DETAIL B (+Y, -Z holes) 4 -- DETAIL C (mid-board) 5 -- DETAIL D (-Y, -Z holes) 6 -- DETAIL E (+Y, -Z holes) 7 -- Cartesian coordinates
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DWG. NO.	--
REV	i
SIZE	A
SCALE:	1:2
SHEET	1 OF 7



DETAIL A

SCALE 3 : 1

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UNLESS OTHERWISE SPECIFIED:
 DIMENSIONS ARE IN MILLIMETERS
 TOLERANCES:
 FRACTIONS: 1/32
 ANGULAR: MACH ± BEND ±
 TWO PLACE DECIMAL ±.01
 THREE PLACE DECIMAL ±.001



MATERIAL
FR4
 FINISH
--
 Weight
 DO NOT SCALE DRAWING

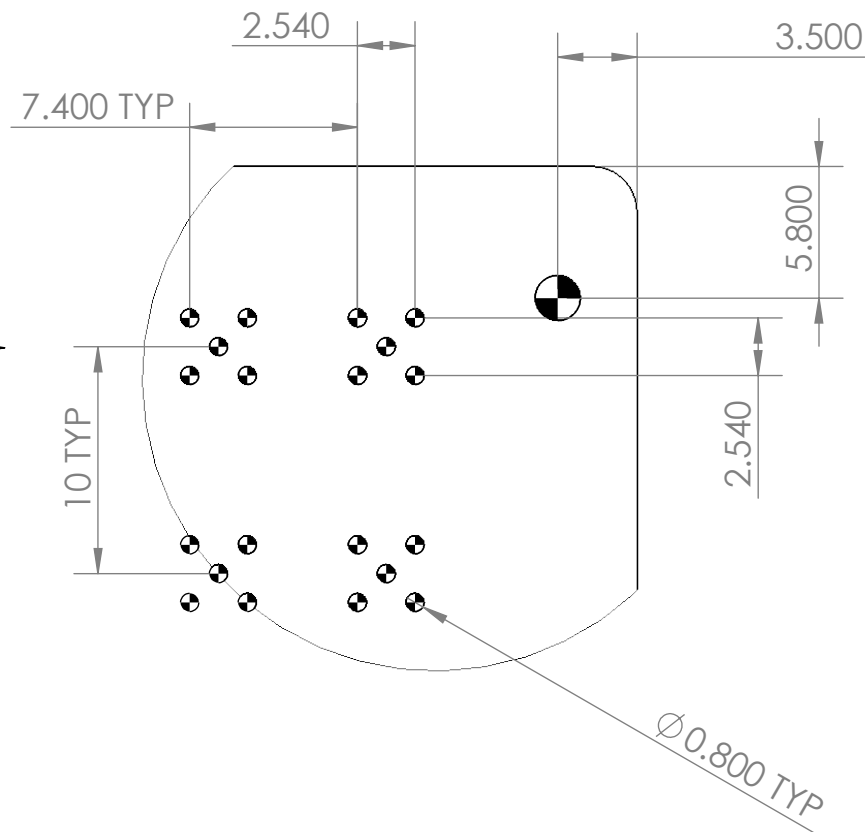
	NAME	DATE
DRAWN	Joe S.	2017-10-05
CHECKED	--	
ENG APPR.	--	
MFG APPR.	--	

Description:
 locations of the mounting holes for the
 backplane, 40 pin connectors, and 20
 pin connector, as well as the
 passthrough for the solar panel
 connector

COMMENTS:
 The 20 and 40 pin connectors are
 all oriented with the notched side
 in the -Z direction (down).

DWG. NO.		
--		
REV	SIZE	SCALE: 3:1
i	A	SHEET 2 OF 7

card 1 →



DETAIL B

SCALE 3 : 1



UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE IN MILLIMETERS
TOLERANCES:
FRACTIONS: 1/32
ANGULAR: MACH \pm BEND \pm
TWO PLACE DECIMAL \pm .01
THREE PLACE DECIMAL \pm .001

MATERIAL
FR4
FINISH
--
Weight
DO NOT SCALE DRAWING

	NAME	DATE
DRAWN	Joe S.	2017-10-05
CHECKED	--	
ENG APPR.	--	
MFG APPR.	--	

Description:
locations of the mounting holes for the
MMCX connectors and backplane

COMMENTS:

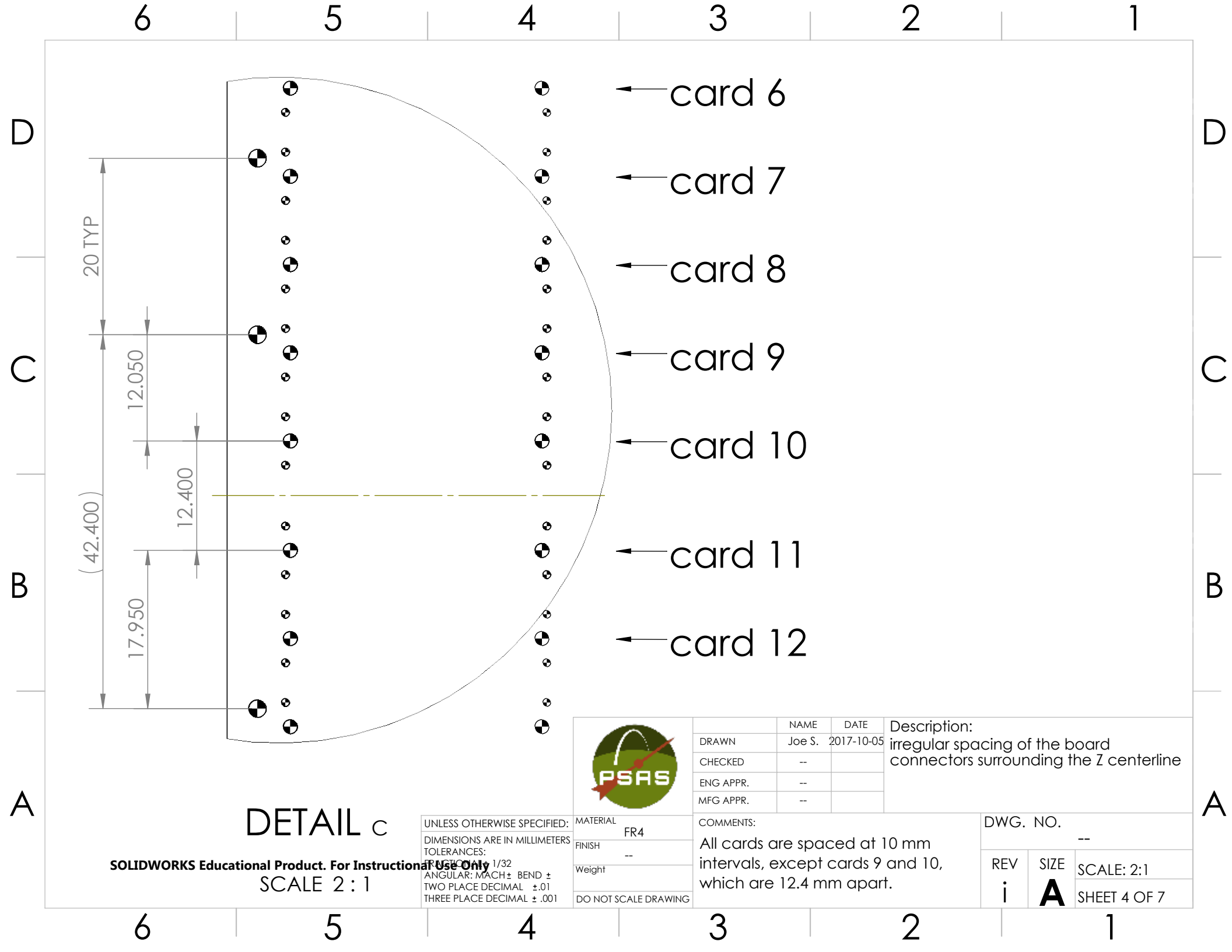
DWG. NO.

--

REV
i

SIZE
A

SCALE: 3:1
SHEET 3 OF 7



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UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE IN MILLIMETERS
TOLERANCES:
FRACTIONS: 1/32
ANGULAR: MACH ± BEND ±
TWO PLACE DECIMAL ±.01
THREE PLACE DECIMAL ±.001



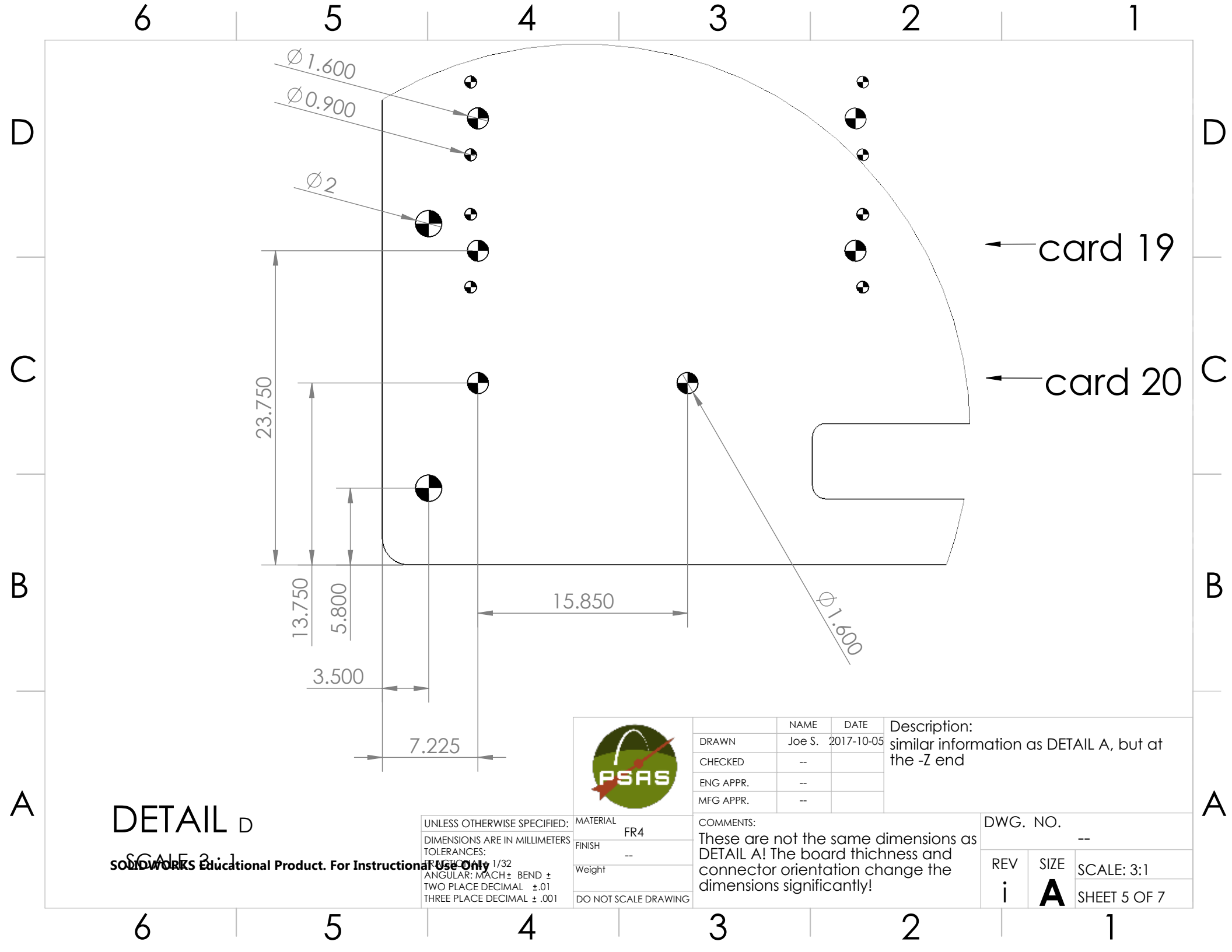
MATERIAL
FR4
FINISH
--
Weight
DO NOT SCALE DRAWING

	NAME	DATE
DRAWN	Joe S.	2017-10-05
CHECKED	--	
ENG APPR.	--	
MFG APPR.	--	

Description:
irregular spacing of the board
connectors surrounding the Z centerline

COMMENTS:
All cards are spaced at 10 mm
intervals, except cards 9 and 10,
which are 12.4 mm apart.

DWG. NO.			--
REV	SIZE	SCALE: 2:1	
i	A	SHEET 4 OF 7	



DETAIL D

SCALE: 3:1

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UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE IN MILLIMETERS
TOLERANCES:
FRACTIONAL 1/32
ANGULAR: MACH \pm BEND \pm
TWO PLACE DECIMAL \pm .01
THREE PLACE DECIMAL \pm .001



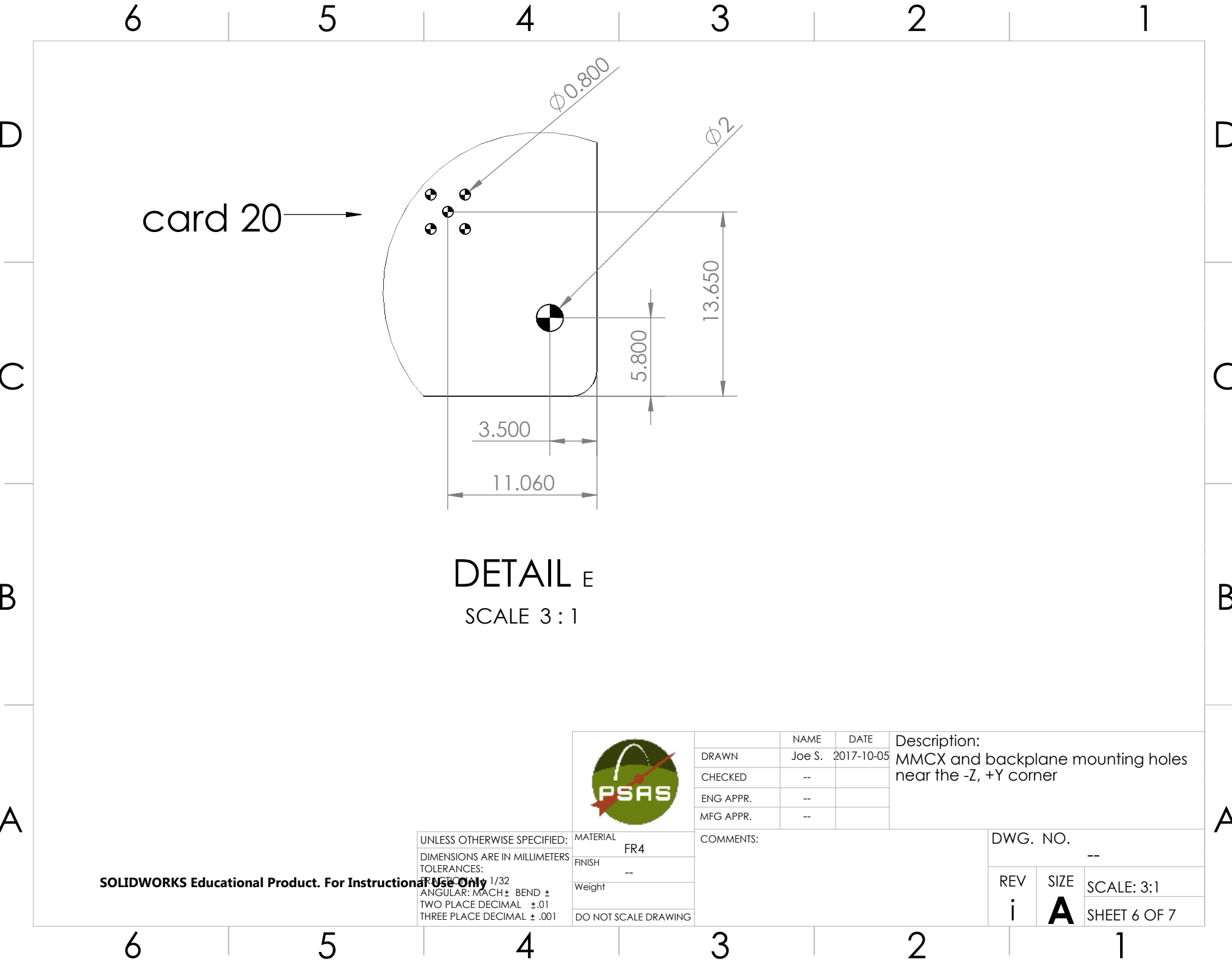
MATERIAL
FR4
FINISH
--
Weight
DO NOT SCALE DRAWING

	NAME	DATE
DRAWN	Joe S.	2017-10-05
CHECKED	--	
ENG APPR.	--	
MFG APPR.	--	

Description:
similar information as DETAIL A, but at
the -Z end

COMMENTS:
These are not the same dimensions as
DETAIL A! The board thickness and
connector orientation change the
dimensions significantly!

DWG. NO.			--
REV	SIZE	SCALE: 3:1	
i	A	SHEET 5 OF 7	



card 20 →

DETAIL E
SCALE 3 : 1



	NAME	DATE
DRAWN	Joe S.	2017-10-05
CHECKED	--	
ENG APPR.	--	
MFG APPR.	--	

Description:
MMCX and backplane mounting holes
near the -Z, +Y corner

UNLESS OTHERWISE SPECIFIED:	MATERIAL
DIMENSIONS ARE IN MILLIMETERS	FR4
TOLERANCES:	FINISH
PARTS TO 1/32	--
ANGULAR: MACH ± BEND ±	Weight
TWO PLACE DECIMAL ±.01	DO NOT SCALE DRAWING
THREE PLACE DECIMAL ± .001	

COMMENTS:

DWG. NO.		
--		
REV	SIZE	SCALE: 3:1
i	A	SHEET 6 OF 7

