

View from Top side (Scale 2:1)

View from Bottom side (Scale 2:1)

Revision Record:

Rev	ECO	Date	Description
C	4964	20 Mar 2020	I.S. Version. Added U19 LDO for LCD light. Added R50a pull-up. Added Zener protections and proper wattage resistors for I.S. version. Changed U10 to TCXO from MEMs. Changed Q8 to DFN, was BGA.
C2	4977	11 Jun 2020	Added R16a as pull-down on LCD backlight to solder on later.
D	4977	11 Jun 2020	Placed R16a on the board.

1

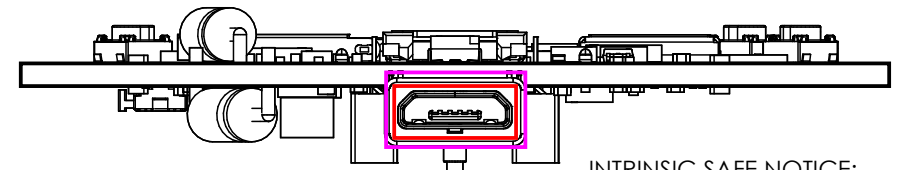
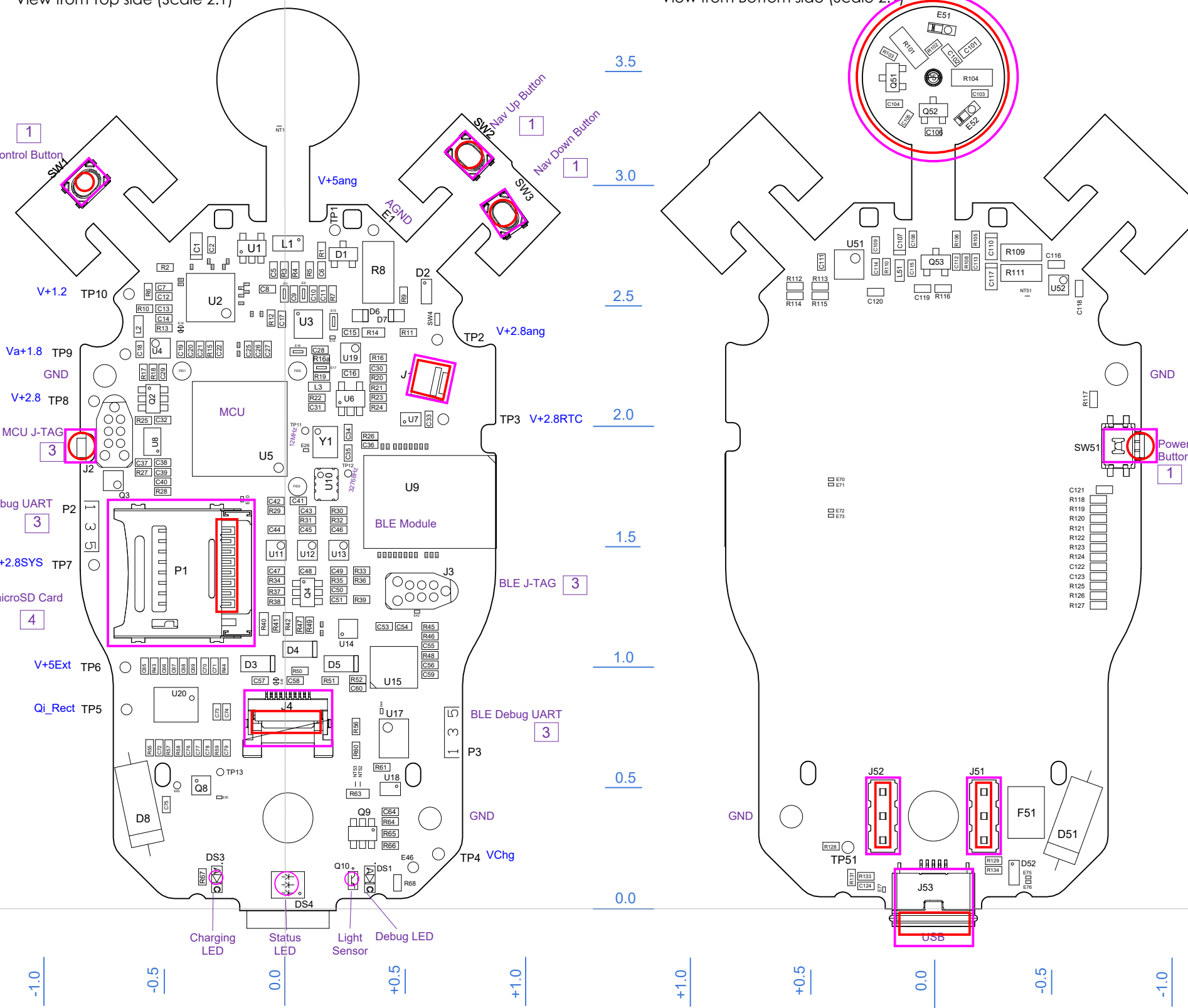
2

1

2

Notes:

- HAND-LOAD SWITCHES (SW1, SW2, SW3, & SW51) POST REFLOW SOLDER AND CLEANING, NO SOLVENT CLEANING
- DO NOT GET FLUX CONTAMINANT INTO SWITCHES OR CONNECTORS
- NO PART INSTALLED FOR J2, J3, P2, P3. "DNP" VARIANT PARTS ARE NOT SHOWN AND ARE NOT ON BOM.
- LOAD 3045.0116 microSD CARD IN SOCKET P1  
The equipment may be used with a generic microSD card providing that the component has a surface area in excess of 20mm<sup>2</sup> and is not capable of providing an enhanced voltage to the external connections.
- USE SAC305 SOLDER, ASSEMBLED BOARD TO BE RoHS COMPLIANT
- PCB: P730.01-IS  
Top Stencil: T730.0101-IS Rev. D  
Bottom Stencil: T730.0102-IS Rev. C
- Load and trim Anode lead of D51 prior to installing D8. Ensure body of D57 does not block the slot in PCB.
- Coat both sides of board after board test with two layers of Acrylic conformal coating (Humiseal 1B73 or equivalent); exclude indicated connector, button, and contact areas. The outer line indicates the maximum masked area and the inner outline is the minimum masked area.
- Safety critical components (D6, D7, D8, D51, F51, R8, R43, R109, R111 & R128) require 100% verification. Install D8 and D51 with part number visible for inspection.
- Board must be marked with tracking label to identify batch and components supplied.



**FINISHED ASSEMBLY TO BE RoHS COMPLIANT**

INTRINSIC SAFE NOTICE:

This is a Related Drawing, relating to the Scheduled Drawing "A730.12-ASM-IS-SD", which has been approved by a notifying body for the purpose of being used in an explosive environment. Do not revise this drawing without first having it reviewed by Engineering and the ISP Manager. Any changes to this drawing could result in an unsafe condition.

THIS DOCUMENT IS PROVIDED IN PDF FORM IN ORDER VIEW FINE DETAILS THAT MAY NOT BE VISIBLE IN PRINTED FORM, ZOOM IN TO VIEW



Title <b>Dosimeter Main Board</b>			
Item	A730.12-IS	Desc.	Spartan 730 — Assembly Drawing
Size	B	PCB Designer	Alan Rasmussen
Created	10 Jan 2018	Engineer	Alan Rasmussen
Revised	11 Jun 2020		1 / 1