



COMMON INDUSTRIAL USER INTERFACE

Change Log:

REV B

- Page 2
  - Move C200 to page 3 to become C368
  - Pin 6 of J3 is now HR\_METER\_OUT instead of NC
  - Add R203, R204, C208
  - C201 moved to page 14 to become C1403
  - Add page 14 and 15 sheet symbols
  - Add J18, J19, J20
- Page 3
  - Change D301 to be bidirectional TVS diode
  - Change R310 and R313 100k and 52.3k, respectively values
- Page 4
  - Added 70mA current mirror
- Page 7
  - Added additional signals related to new inputs and outputs. No existing pins were changed
  - Added UART 5 to pins D16 and A15
  - Changed U703 to FSUSB30MUX
- Page 8
  - Delete R802 and R803
  - GPIO\_SPARE\_1 moved to pin B7 to accommodate PWM signal on pin E10
  - Delete R808 and reduce HWD REV bits to 3 total instead of 4.
  - Added additional input signals Digin 4 through Digin 10
  - Add new Ain pins to AA16 and AB15
- Page 11
  - Move Digin 3 circuit to page 14
  - Added U1105, C1108, C1109, C1110, C1111, C1112
- Page 12
  - Add R1226 through R1257
- Add Page 14
  - 7 new digins and 2 new Ains
- Add Page 15
  - 8 new 0.5A LSDs
  - 4 new 2A LSDs
  - 1 new 5V HSD for HR meters

REVC

- Page 7
  - Swap SPI Data lines. SPI\_0\_MISO now on Pin T22 and SPI\_0\_MOSI now on Pin T21
- Page 10
  - added pins C1, A2, and N1 to ease breakout of the eMMC part

7-bit I2C addresses (12C0)				
SA0 for IMU/Accel	0	1	0	1
SA1 for IMU/Accel	0	0	1	1
BMI270	0x68	0x69		
LSM6DSMTR	0x6A	0x6B		
ISM330DLC	0x6A	0x6B		
ISM330DHC	0x6A	0x6B		
ISM330DHCX	0x6A	0x6B		
BNO055	0x29	0x28		
Accel - FXLS8471QR1	0x1E	0x1D	0x1C	0x1F
LED Driver 0 - TLC59116FIRHBR	0x61			
LED Driver 1 - TLC59116FIRHBR	0x62			
EEPOT - ISL90728WIE627Z	0x3E			
PMIC - TPS65218D0	0x24			
7-bit I2C addresses (I2C1)				
Video Decoder - TW9990	0x45			

BOM ITEMS:

PCB

BOM

Q25098-003  
PCB, Industrial UI

FW1


DNI

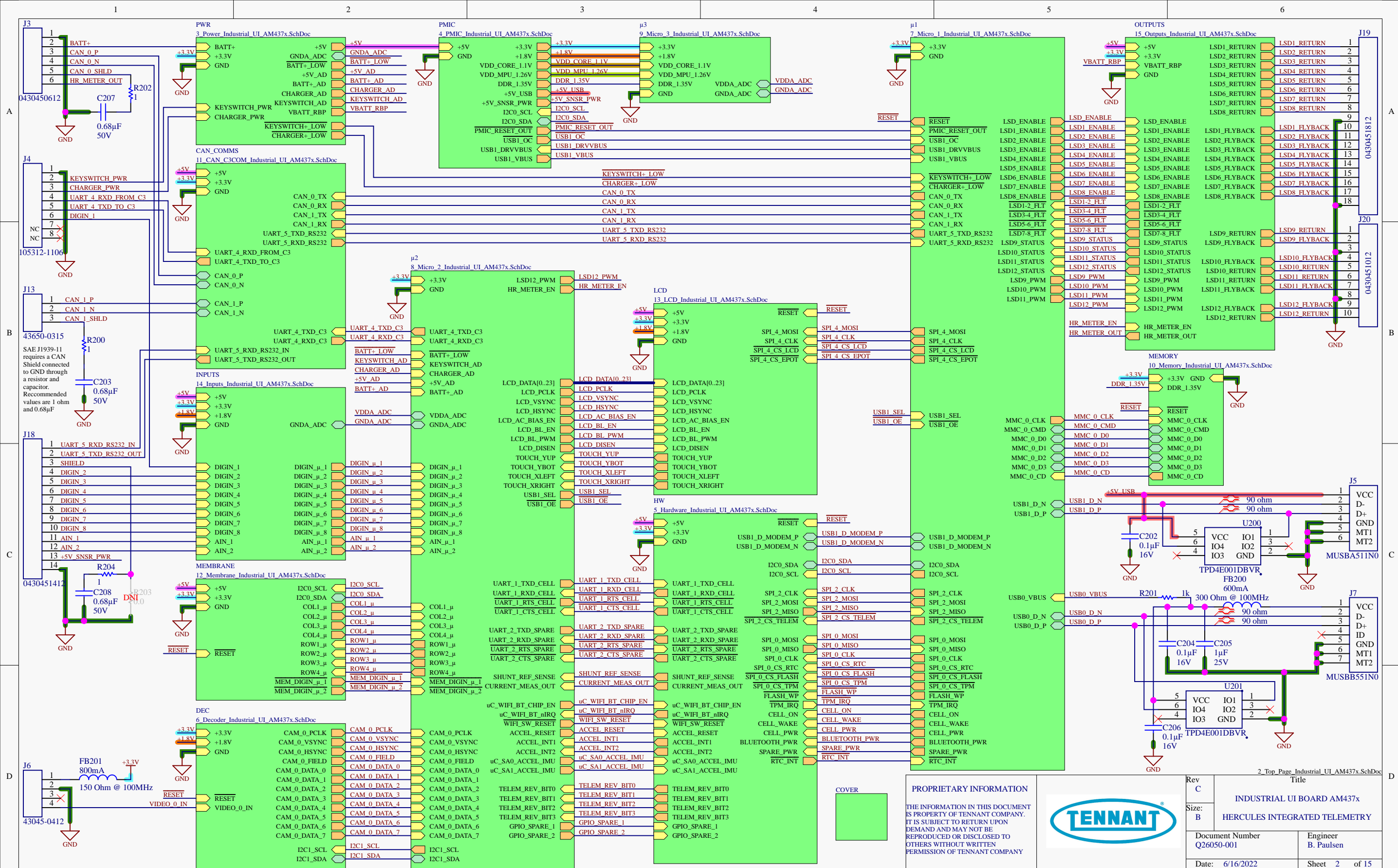
Q30124-001  
Firmware-Application, U1001

FW2

DNI

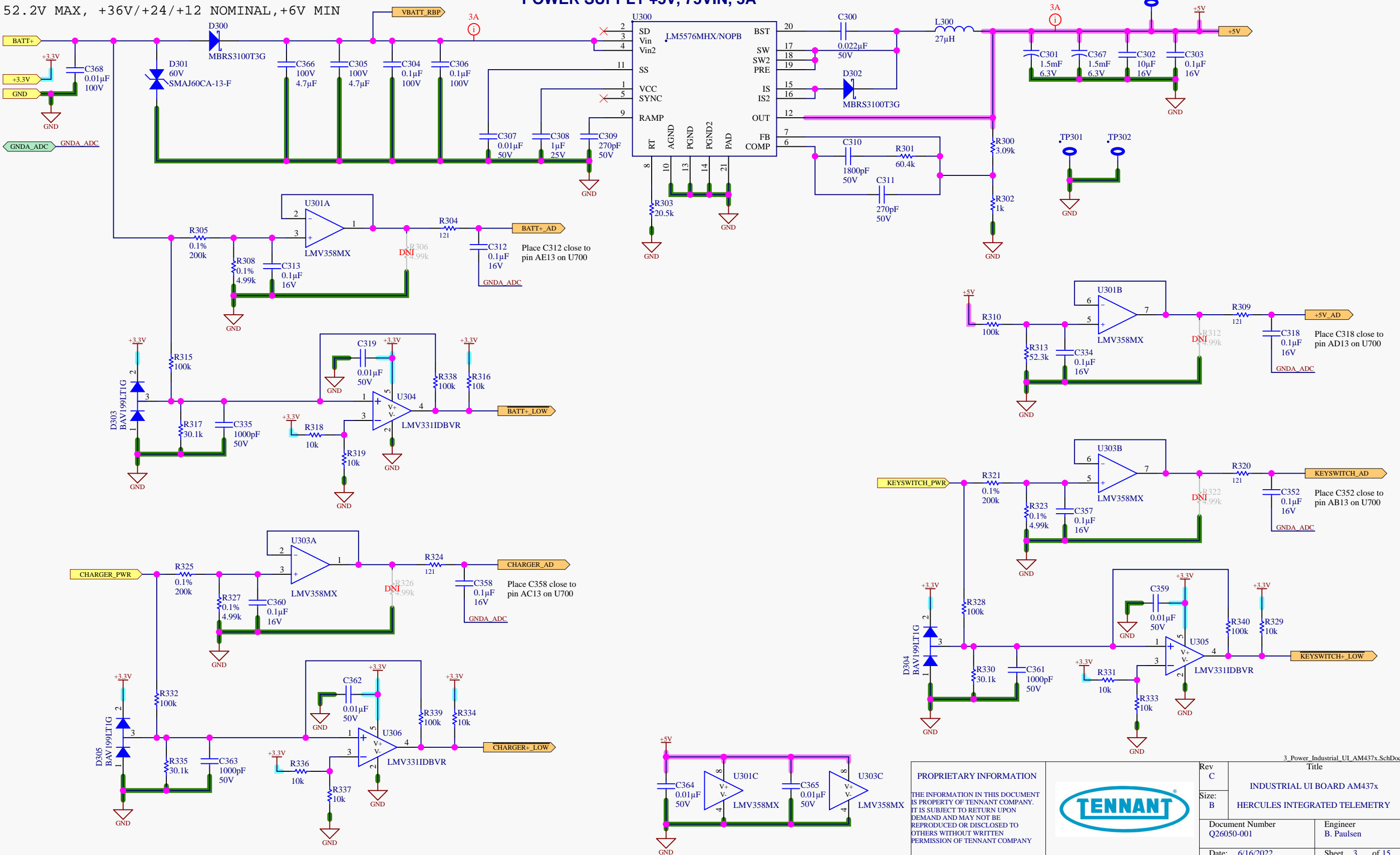
Q30125-001  
Firmware-Bootloader, U500

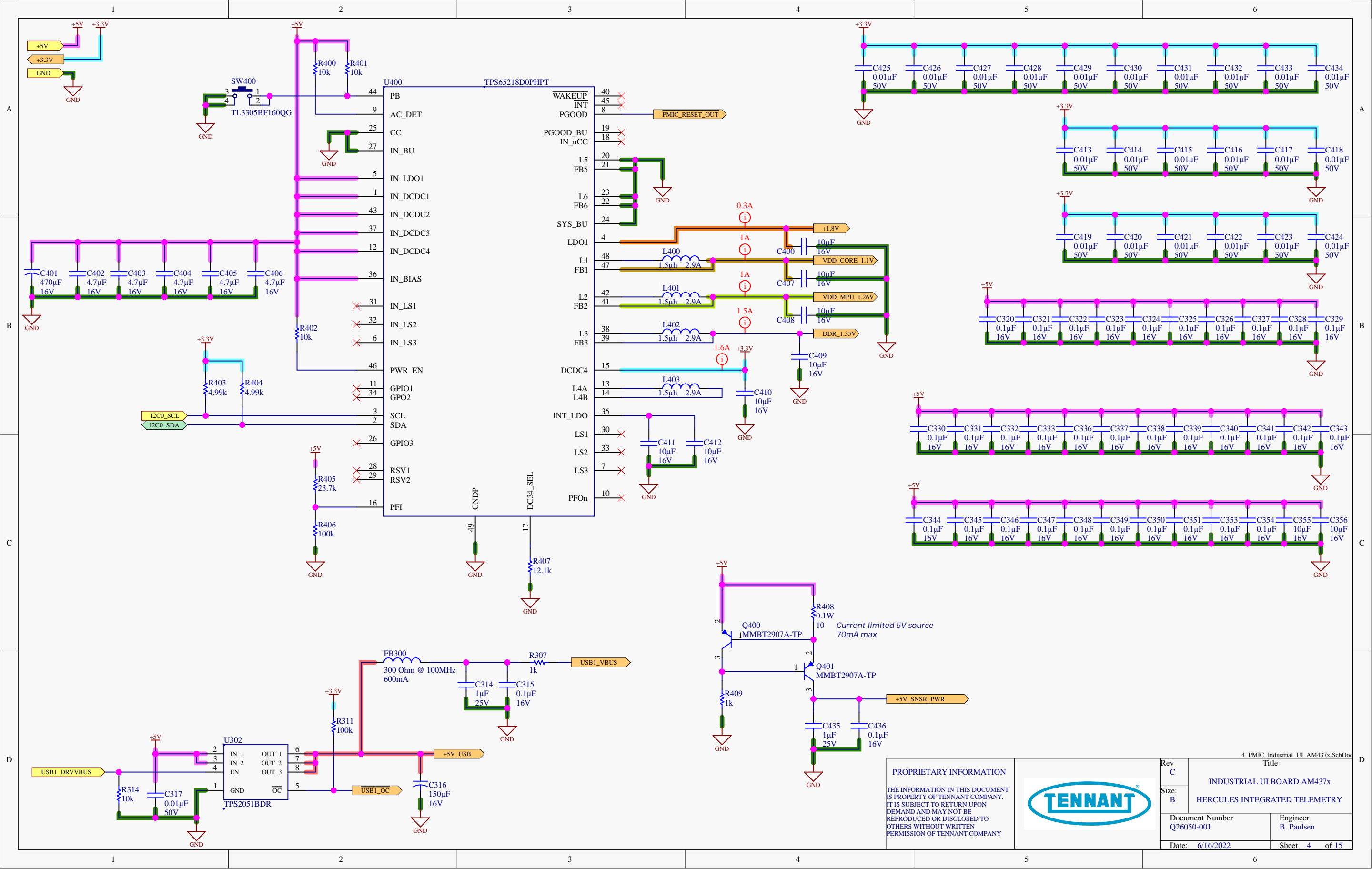
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		Size: B	HERCULES INTEGRATED TELEMETRY		
		Document Number Q26050-001		Engineer B. Paulsen	
		Date: 6/16/2022		Sheet 1 of 15	



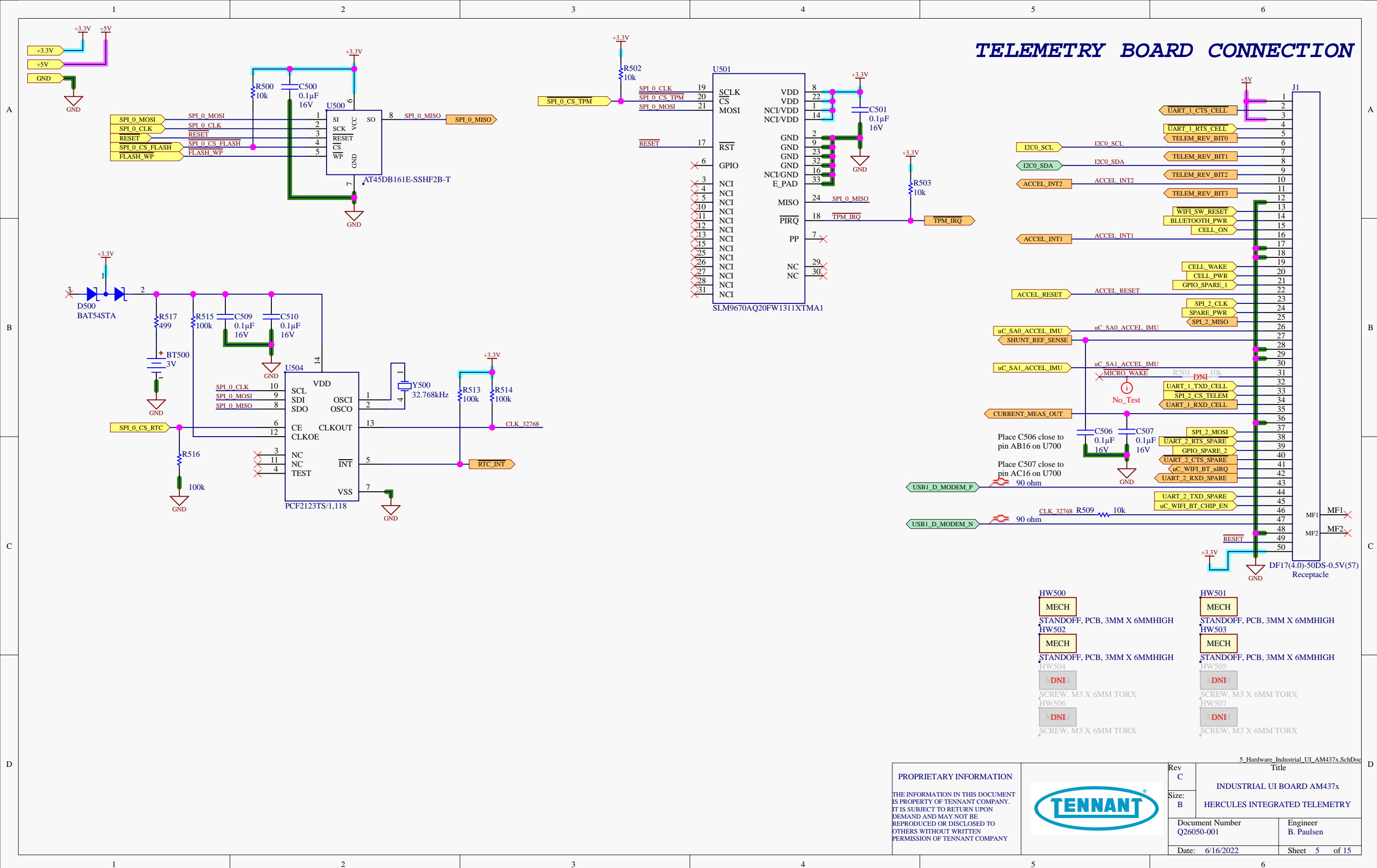
POWER INPUT  
52.2V MAX, +36V/+24/+12 NOMINAL, +6V MIN

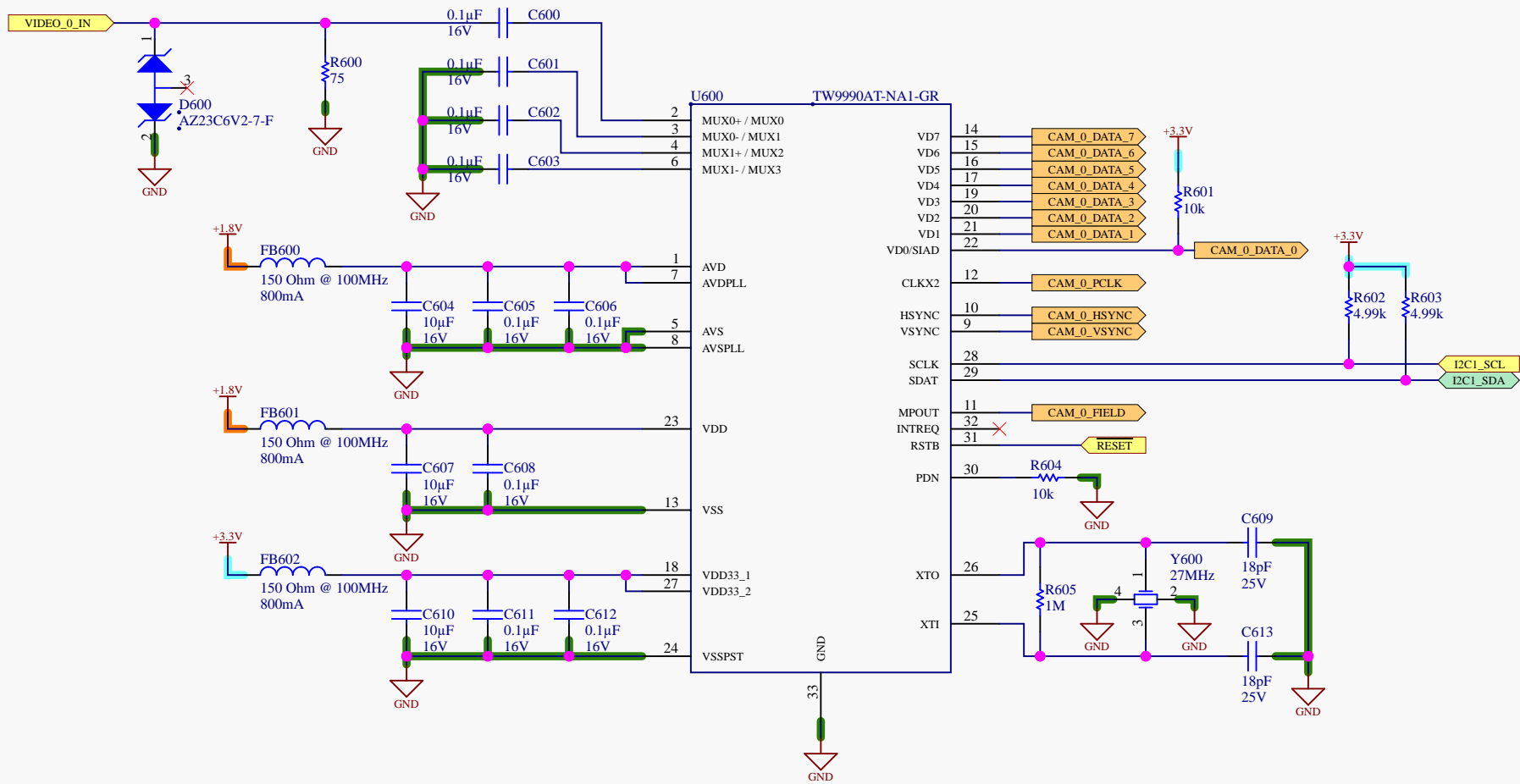
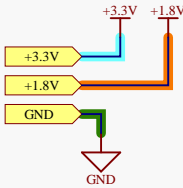
POWER SUPPLY +5V, 75VIN, 3A











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Rev	C	INDUSTRIAL UI BOARD AM437x	
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Q26050-001		B. Paulsen	
Date:		Sheet	
6/16/2022		6 of 15	

