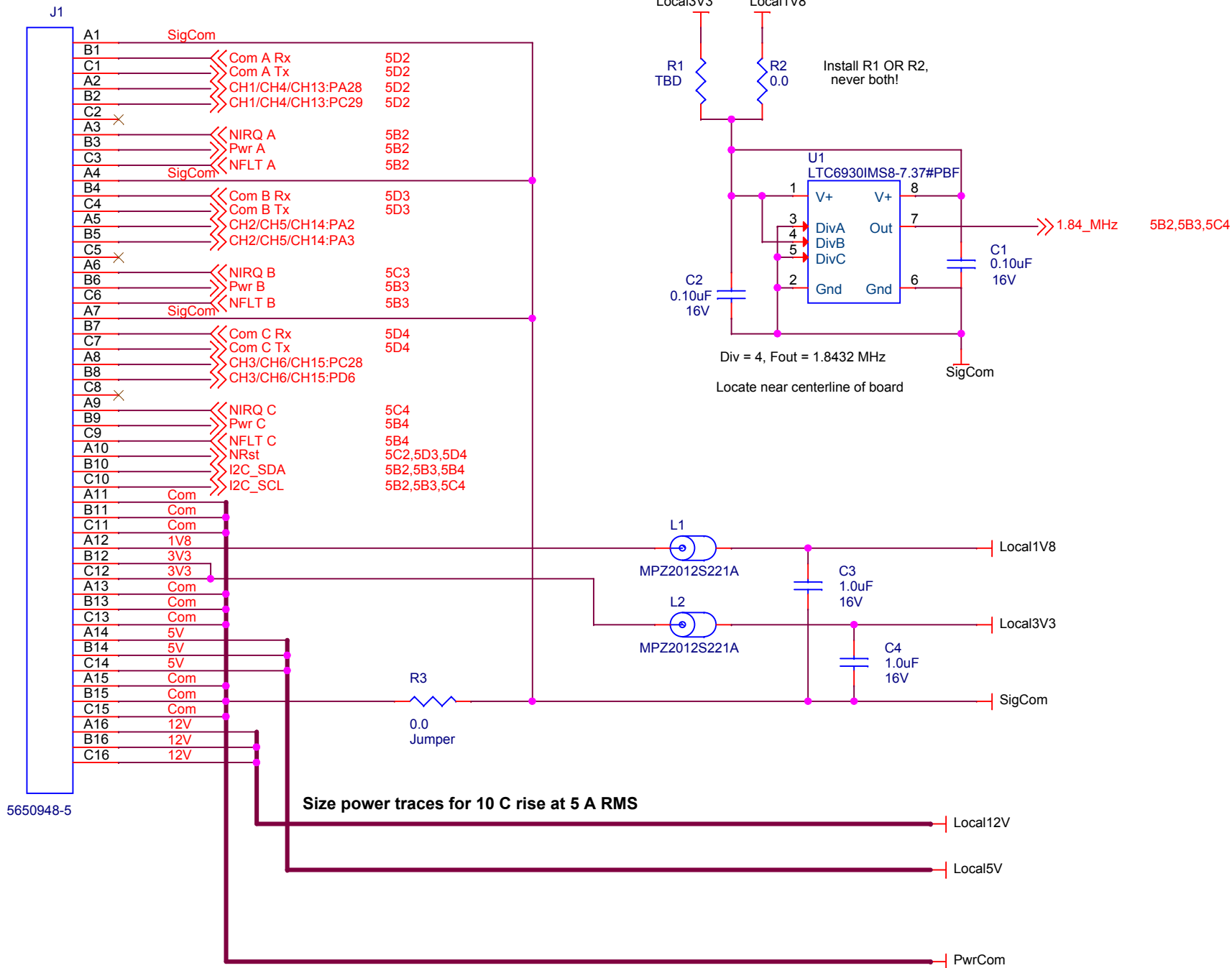


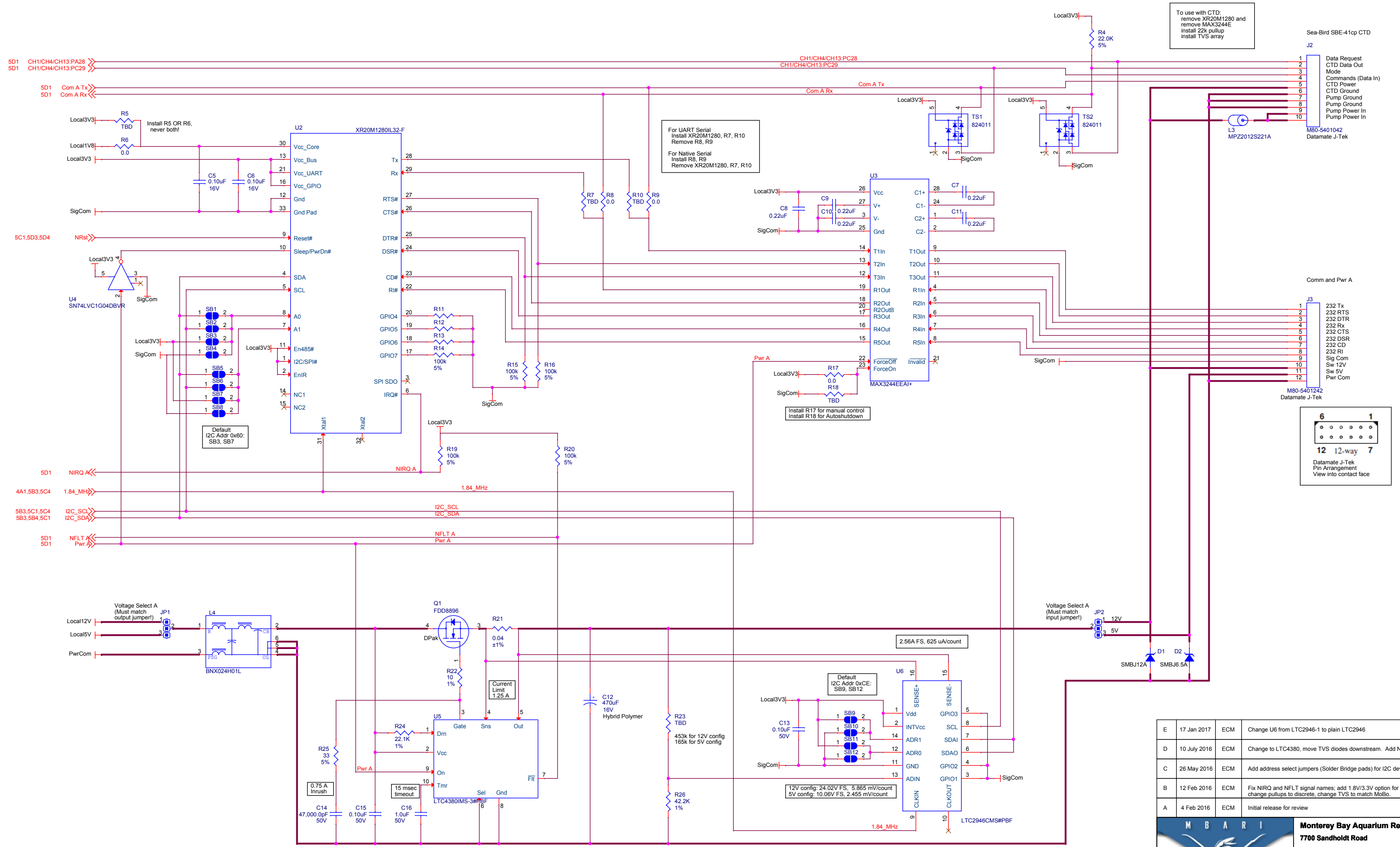


D	24 Aug 2016	ECM	Correct separation of Com and SigCom nets
C	26 May 2016	ECM	Change J1 signal names to match .XLS sheet 13 (18 Apr 16)
B	12 Feb 2016	ECM	Fix NIRQ and NFLT signal names; add 1.8V/3.3V option for oscillator
A	4 Feb 2016	ECM	Initial release for review



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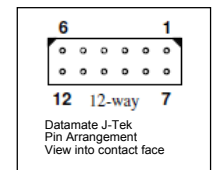
Title Schematic, Bus Interface, Power Switch Board, Coastal Profiling Float			Document Number 100221094	Rev D
Size B	Date: Wednesday, September 21, 2016	Engineer Mellinger	Sheet 1	of 5
Design File X:\CPF\ELECTRICAL ENGR\IED'S STUFF\SCHEMATICS\100221094-CPF-POWERSWITCH.DSN				
Schematic Name 100221094CPF-PwrSwitchSchematic		Page Name 01BusInterface	Layout File <Layout File>	



To use with CTD:
remove XR20M1280 and
remove MAX3244E
install 22k pullup
install TVS array

- Sea-Bird SBE-41cp CTD
- | | |
|----|--------------------|
| 1 | Data Request |
| 2 | CTD Data Out |
| 3 | Mode |
| 4 | Commands (Data In) |
| 5 | CTD Power |
| 6 | CTD Ground |
| 7 | Pump Ground |
| 8 | Pump Ground |
| 9 | Pump Power In |
| 10 | Pump Power In |
- M80-5401042
Datamate J-Tek

- Comm and Pwr A
- | | |
|----|---------|
| 1 | 232 Tx |
| 2 | 232 RTS |
| 3 | 232 Rx |
| 4 | 232 CTS |
| 5 | 232 DSR |
| 6 | 232 CD |
| 7 | 232 RI |
| 8 | Sig Com |
| 9 | Sw 12V |
| 10 | Sw 5V |
| 11 | Pwr Com |
| 12 | |
- M80-5401242
Datamate J-Tek

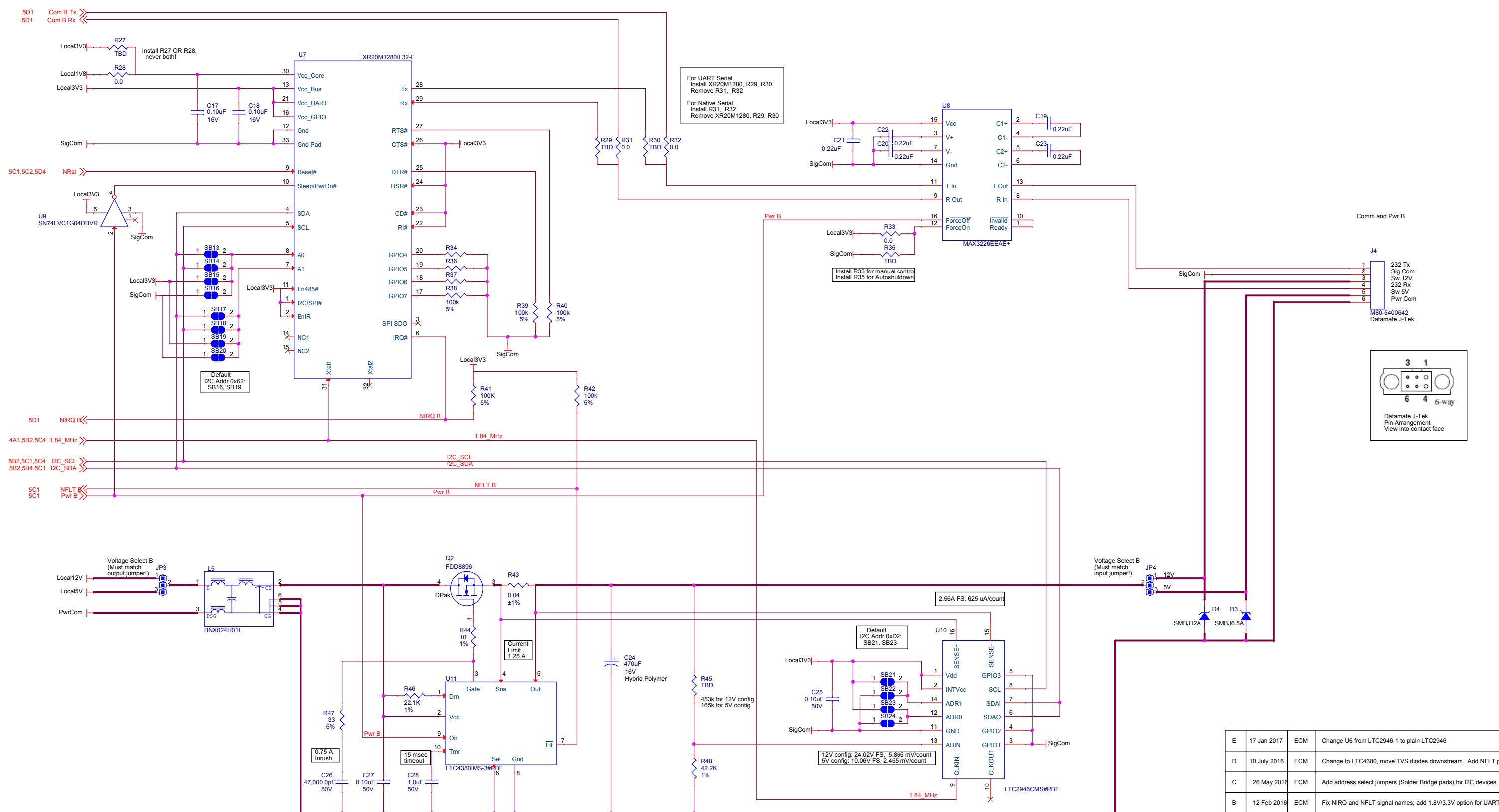


E	17 Jan 2017	ECM	Change U6 from LTC2946-1 to plain LTC2946
D	10 July 2016	ECM	Change to LTC4380, move TVS diodes downstream. Add NFLT pullup.
C	26 May 2016	ECM	Add address select jumpers (Solder Bridge pads) for I2C devices.
B	12 Feb 2016	ECM	Fix NIRO and NFLT signal names; add 1.8V/3.3V option for UART; change pullups to discrete, change TVS to match MoBo.
A	4 Feb 2016	ECM	Initial release for review



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Title			Document Number	Rev
Schematic, Channel A, Power Switch Board, Coastal Profiling Float			100221094	E
Size	Date:	Engineer	Sheet	of
Custom	Thursday, January 19, 2017	Mollinger	2	5
Design File				
X:\CPFELECTRICAL\ENGRIED'S STUFF\SCHEMATICS\100221094-CPF-POWERSWITCH.DSN				
Schematic Name		Page Name	Layout File	
100221094-CPF-PwrSwitchSchematic		02ChannelA	<Layout File>	



For UART Serial
Install XR20M1280, R29, R30
Remove R31, R32

For Native Serial
Install R31, R32
Remove XR20M1280, R29, R30

Install R33 for manual control
Install R35 for Autoshtutdown

Default
I2C Addr 0x62:
SB16, SB19

Default
I2C Addr 0xD2:
SB21, SB23

12V config: 24.02V FS, 5.865 mV/count
5V config: 10.06V FS, 2.465 mV/count

Current Limit
1.25 A

15 msec
timeout

2.56A FS, 625 uA/count

E	17 Jan 2017	ECM	Change U6 from LTC2946-1 to plain LTC2946
D	10 July 2016	ECM	Change to LTC4380, move TVS diodes downstream. Add NFLT pullup.
C	26 May 2016	ECM	Add address select jumpers (Solder Bridge pads) for I2C devices.
B	12 Feb 2016	ECM	Fix NIRQ and NFLT signal names; add 1.8V/3.3V option for UART
A	4 Feb 2016	ECM	Initial release for review



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Title Schematic, Channel B, Power Switch Board, Coastal Profiling Float			Document Number 100221094	Rev E
Size Custom	Date: Thursday, January 19, 2017	Engineer Mellinger	Sheet 3	of 5
Design File X:\CP\FELECTRICAL\ENGRIED'S STUFFS\SCHEMATICS\100221094-CPF-POWERSWITCH.DSN				
Schematic Name 100221094-CPF-PwrSwitchSchematic		Page Name 03ChannelB	Layout File <Layout File>	

