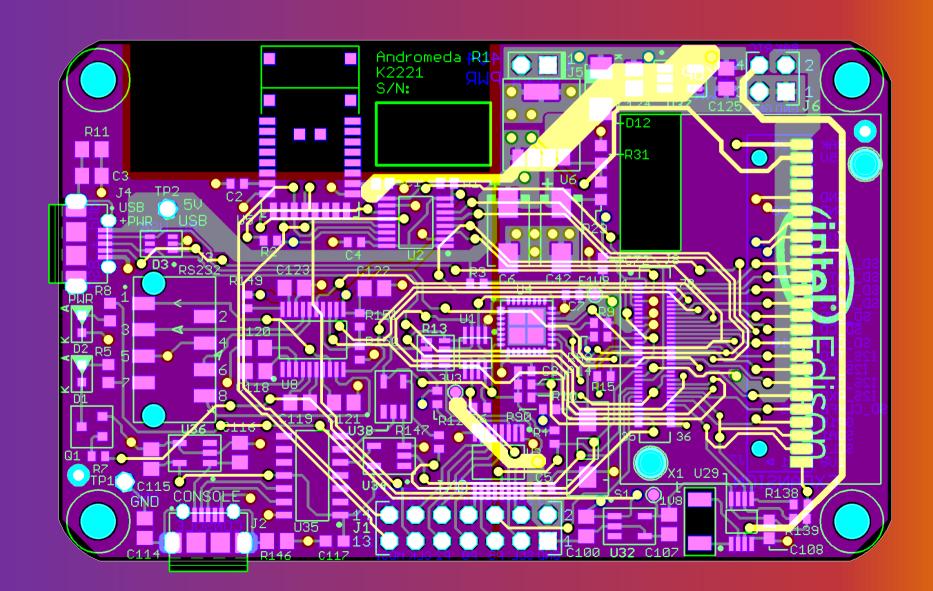
C3Pio

Main Board (Andromeda)

Schematics Revision 1.0



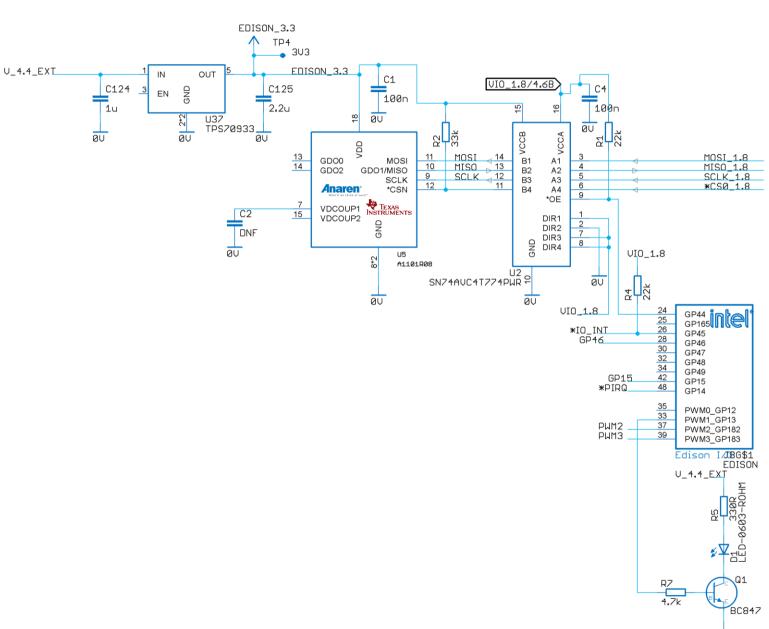
Notices

- The design is shared under CC BY-NC-SA 3.0 license
- The design was successfully powered up and used, however there could be unnoticed errors. It is a freely provided design with no warranty
- Enjoy!

- Mitko and Shabaz, February 2019

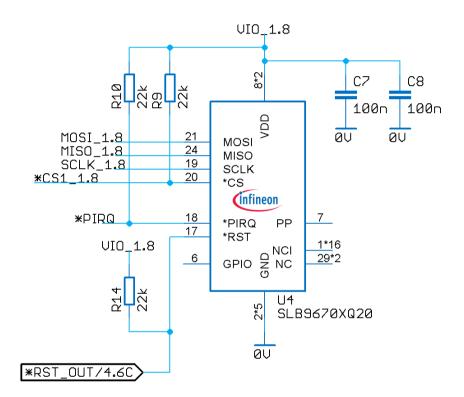
Long-range Wireless (Sub-1GHz)

- A Texas Instruments based device is used for sub-1GHz based communication
- Revision 1.0 uses an on-board antenna



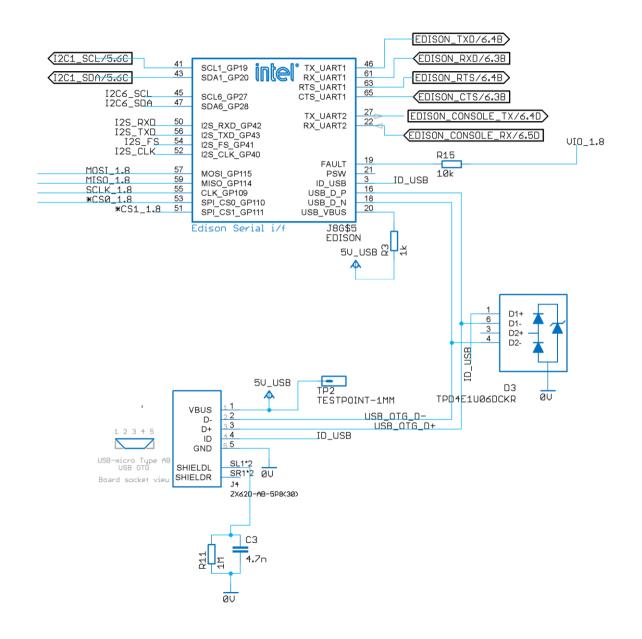
Trusted Platform

• OPTIGA TPM from Infineon



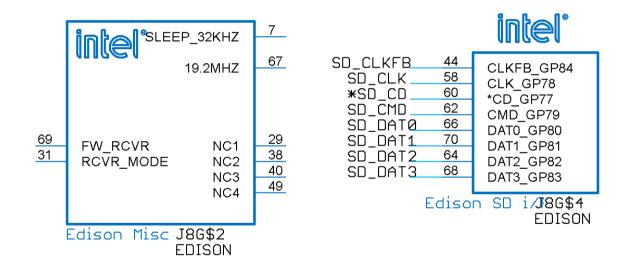
USB OTG and Serial Connections to Processor

 Intended for USB Device mode predominantly, but connections brought out in case USB Host is needed (USB Host is not expected for the usecase)



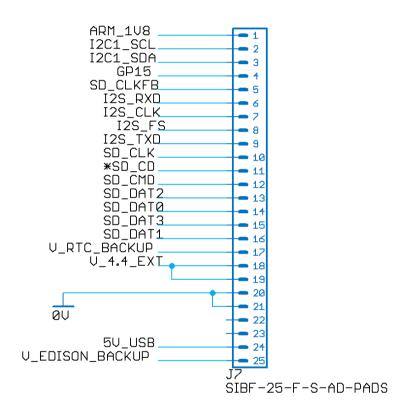
SD Card Interface

 SD card interface is brought out to expansion connector; no on-board card slot on Andromeda Revision 1



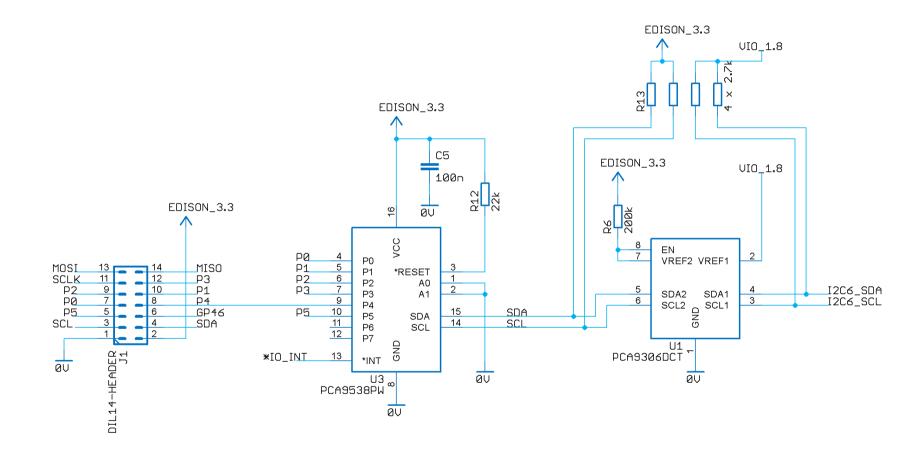
25-way Expansion Port

- Underside connector to attach to sensor board or for any other ancillary functionality
- Consider moving to two 25-way connectors for Revision 2



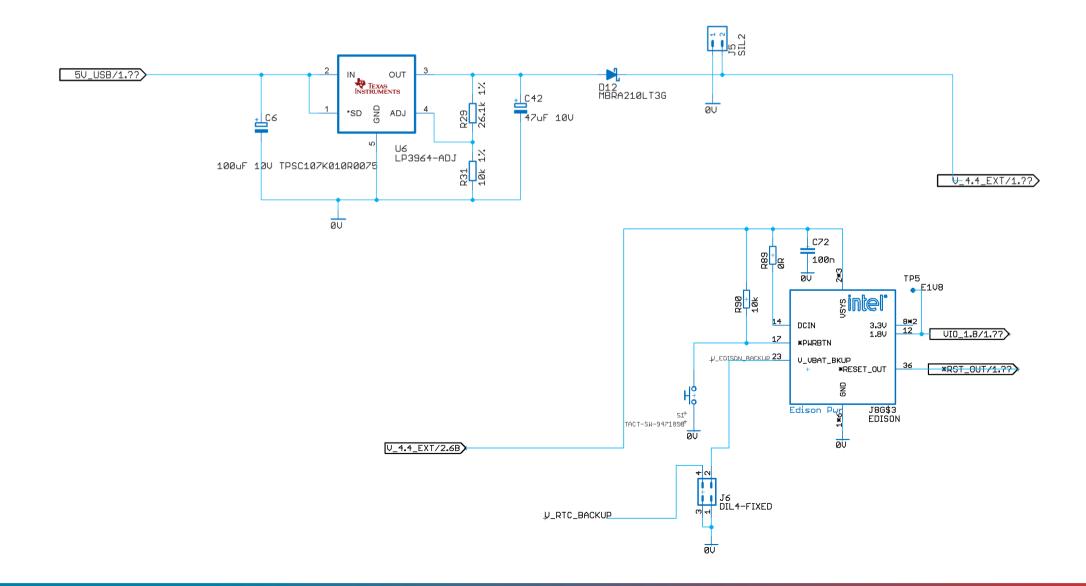
General Purpose Input/Output and Serial Interfaces

• 3.3V logic level interfaces (GPIO/I2C/SPI)



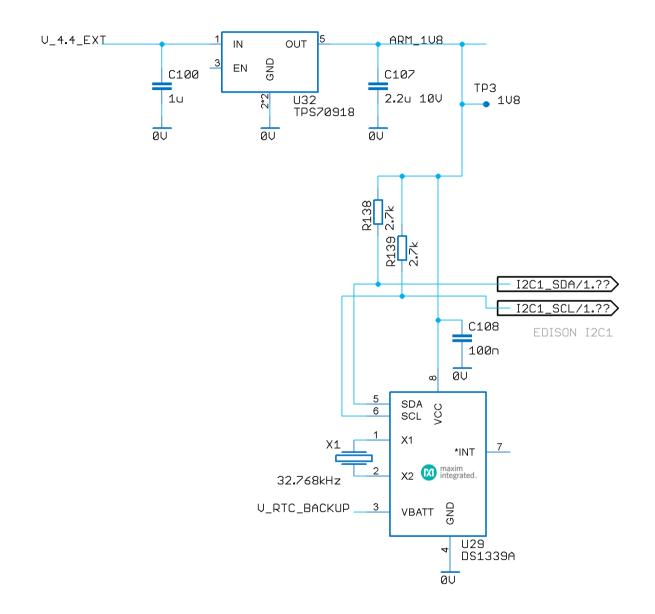
4.4V Supply and Power Management

Supply for Edison

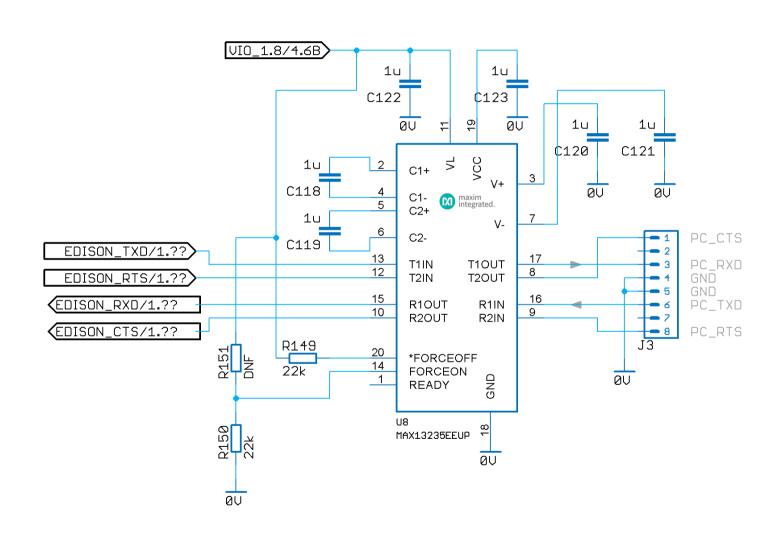


Real Time Clock

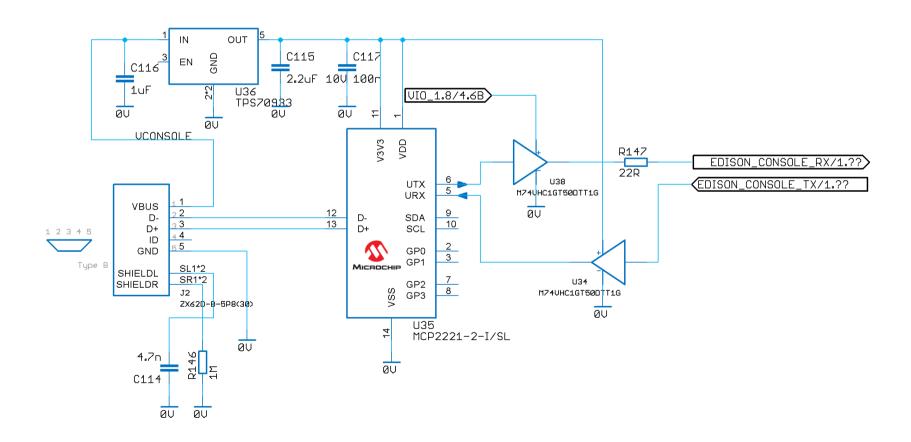
 Backup battery connection is on expansion header



RS232 Interface



Console (Serial) Interface



Thank You