**Microcontroller**

**Operating Conditions**

* 65 C to – 30C

**Core**

* 16 bits

*Thinking this is a good in-between to not have to many bits to mask but not run out.*

* Accumulators?

*The registers?*

**Power Management**

* 0.6mA/MHz Dynamic Current ?
* 30 uA IPD Current ?

**PWM**

* Pulse Width Modulation

*Control analog devices with digital output. Like changing input from DC to AC but for output. Faking analog*

**Communication Interfaces**

* UART

*Simple, slow, up to two devices per UART, 1 wire, full duplex, single master single slave*

* I2C

*Easy to chain multiple devices, faster, up to 127 devices but gets complex, 2 wires, Half duplex ( can only send or receive), multiple slaves and masters*

* ECAN ?
* SPI

*Complex as devices increase, fastest, many devices, 4 wires, Full duplex, 1 master multiple slaves*

**I/O**

* 5V tolerant pins

*The board operating voltage and I/O is 3.3V but all pins are protected against 5V overvoltage.*

* Up to 5mA Overvoltage Clamp Current