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| **Class:** | EE498 Senior Design II | | | **Semester:** | Spring 2018 |
|  | | | | | |
| **Group members:** |  | **Project topic:** | *Fiber Optic Sensor for CubeSat* | | |
| *Jiayi Ren*  *Aaron Volpone* |  | | | |
| **Document:** | Major components list | | |

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| **Part type** | **Vendor** | **Model** | **Parameters** | **Picture** | **Att. id.** |
| Microcontroller | Atmel | ATMega328P | Analog Signal Processor |  | See reference link[1] |
| Laser emitter | QPhotonics | QDFBLD-1550-2EM | Light source |  | See reference link[2] |
| Laser mount | Thorlabs | LM14S2 | Laser butterfly package driver |  | See reference link[3] |
| Photodiodes (x6) | QPhotonics | QPDF-200 | Light input, voltage output |  | See reference link[4] |
| Multichannel fiber cable | Supplied by Dr. Sun | TBD |  |  |  |
| Ruled reflective diffraction grating | Thorlabs | GR25-0608 | Mounted reflective surface |  | See reference link[5] |

**[1] Microcontroller -** <http://www.microchip.com/wwwproducts/ATmega328p>

**[2] Laser emitter -**  [http://www.qphotonics.com/Wavelength-stabilized-single-mode-fiber-coupled-DFB-laser-diode-2mW-1550nm-QDFBLD-1550-2EM.html Telecom\_Datacom\_Laser\_Modules\_Data\_Sheet.pdf](http://www.qphotonics.com/Wavelength-stabilized-single-mode-fiber-coupled-DFB-laser-diode-2mW-1550nm-QDFBLD-1550-2EM.html)

**[3] Laser mount -** <https://www.thorlabs.com/thorproduct.cfm?partnumber=LM14S2>

**[4] Photodiode -** <http://www.qphotonics.com/Fiber-coupled-InGaAs-PIN-photodiode-QPDF-200.html>

**[5] Grating mirror -** <https://www.thorlabs.com/thorproduct.cfm?partnumber=GR25-0608>