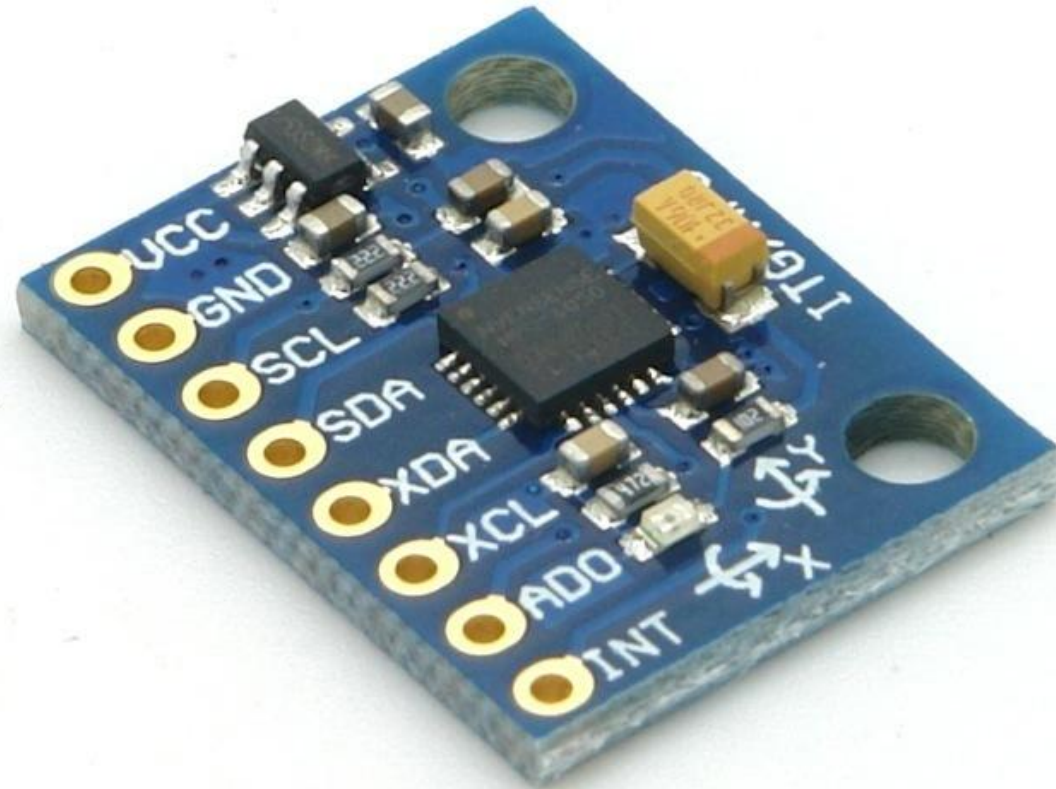




Lecture 7 Perception



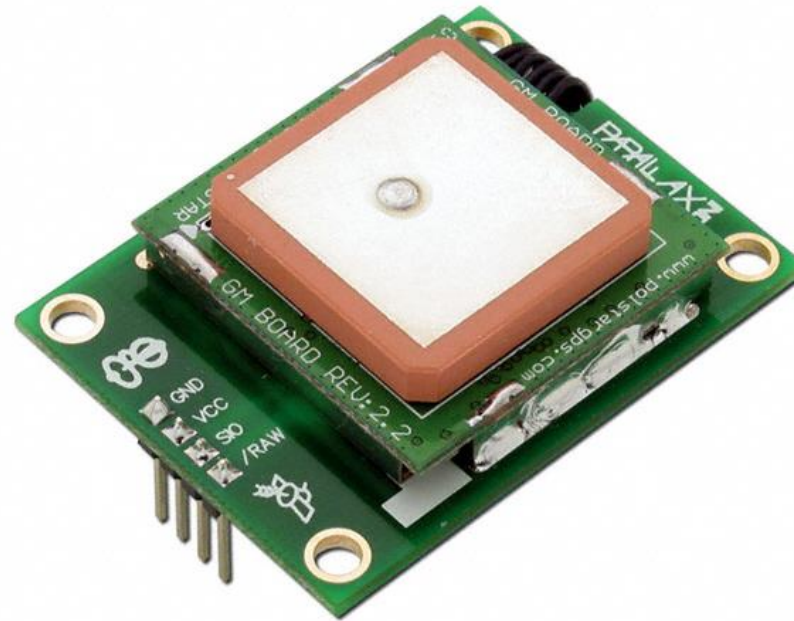






Range Finder- Lidars









Camera Sensors







Stereo Camera Sensors





Computational Units



Raspberry Pi 3 B+

- Broadcom BCM2837B0, Cortex-A53 (ARMv8) 64-bit SoC @ 1.4GHz
- 1GB LPDDR2 SDRAM



Up Board

- Intel® Atom™ x5 Z8350 Processor 64 bit @ 1.44GHz - up to 1.92GHz
- 4GB DDR3L



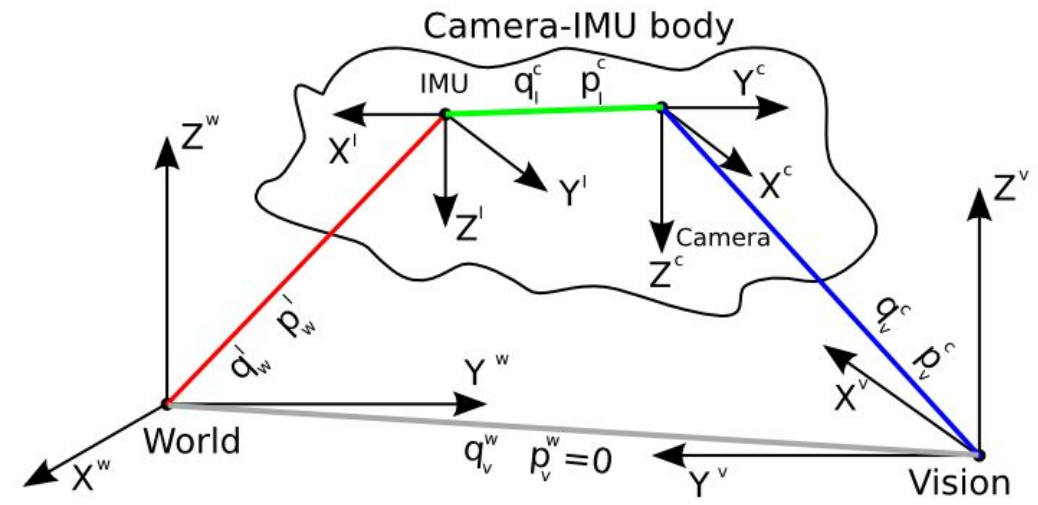
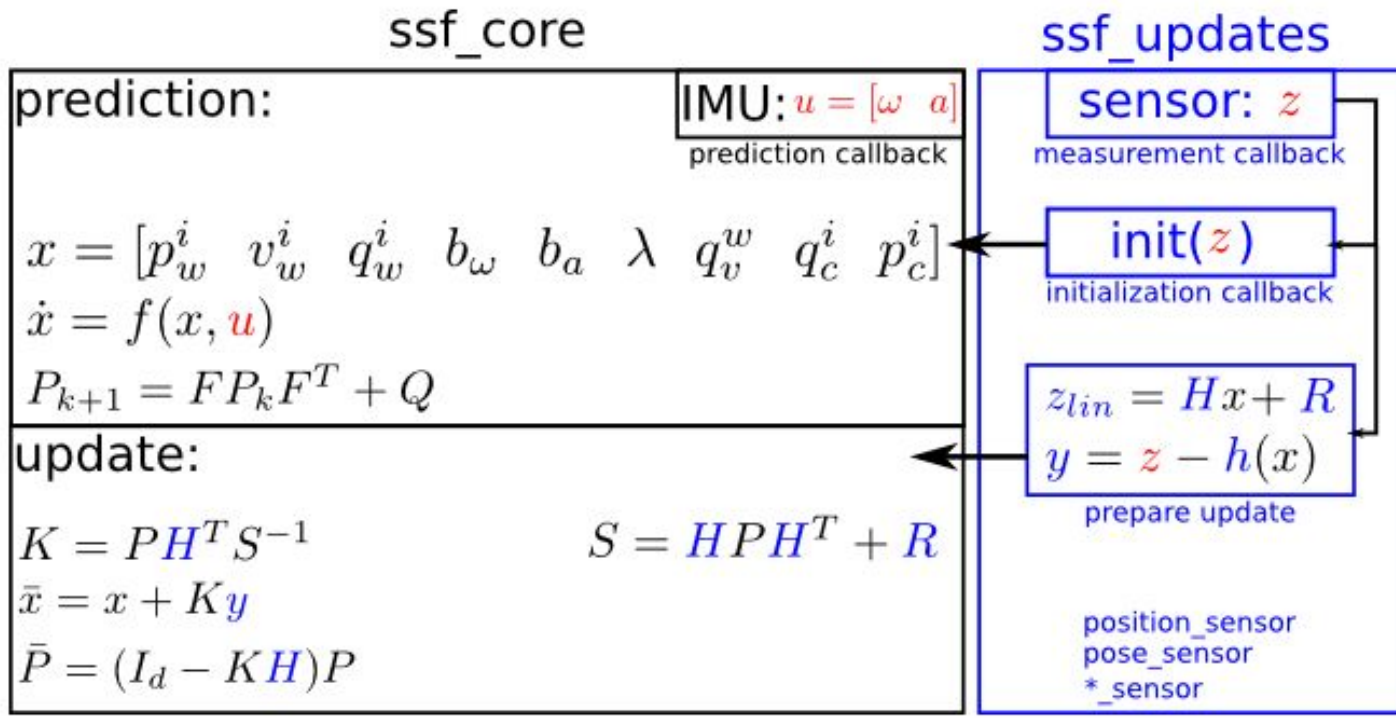
Odroid XU4

- Samsung Exynos5 Octa ARM Cortex™-A15 Quad @ 2Ghz and Cortex™-A7 Quad @ 1.3GHz
- 2GB LPDDR3 RAM



Intel NUC

- Dual-core Intel Core i7- 5557U CPU with multi-threading @ 3.10GHz
- 16GB RAM



*Lynen, S., Achtelik, M. W., Weiss, S., Chli, M., & Siegwart, R. (2013, November). A robust and modular multi-sensor fusion approach applied to mav navigation. In *Intelligent Robots and Systems (IROS), 2013 IEEE/RSJ International Conference on*(pp. 3923-3929). IEEE.