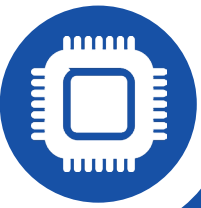


OBCSW team

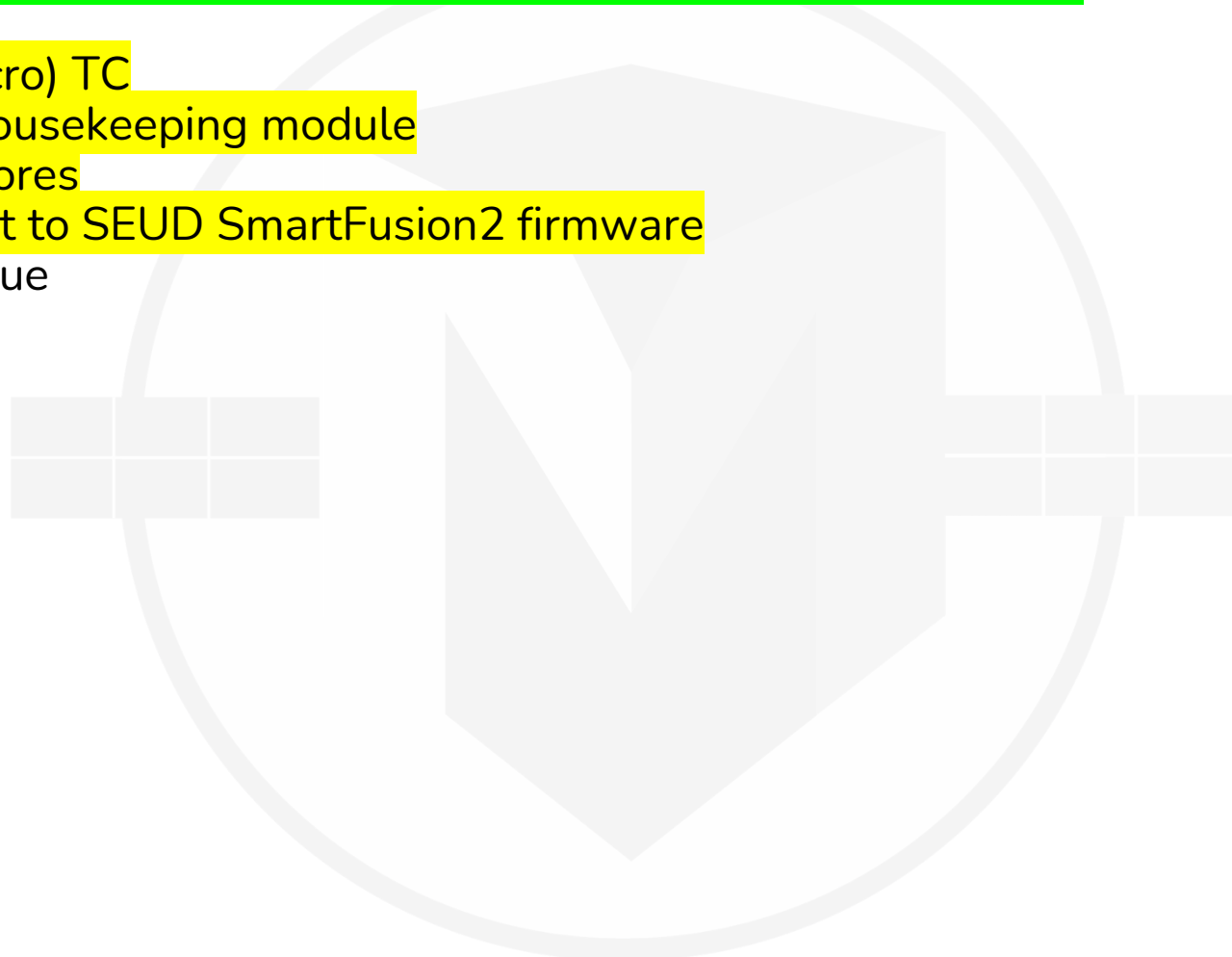
William Stackenäs



Work to be done before the EOSM

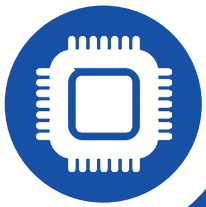


- Setup MIST development environment on stationary computer in Kista
- Initialization FDIR
- New CUBES (Macro) TC
- Elveti graphical housekeeping module
- Mutexes/Semaphores
- Continued support to SEUD SmartFusion2 firmware
- Persistent TC queue



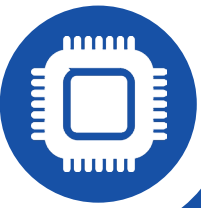


Progress since Mid semester meeting



Period	Required	Preferred
Before integration	<ul style="list-style-type: none">• Define TC to be authenticated/troubleshooting• Add new TM Sources in accordance with M154_035<ul style="list-style-type: none">◦ Add parts of the ADCS library HK to the basic HK beacon• Fix manual memory allocation (bit rotate bug)• OBCSW software update	<ul style="list-style-type: none">• Floating point support in error logs• TM Rate limiting<ul style="list-style-type: none">◦ Lower default log verbosity levels◦ Query the free slot count in the TRXVU downlink buffer• Find a workaround for potential HCC library deadlocks• Update MSP version for all experiments and the OBC• Experiment tasks<ul style="list-style-type: none">◦ CUBES, including New TC and macro TC◦ Nanoprop, including TM/TC and HK◦ SiC/LEGS, including TM/TC, and HK◦ SEUD/Camera, including TM/TC and HK• Help with SEUD and SiC/LEGS development• Semaphores/Mutexes• Extract one macro telecommand at a time• Initialization phase FDIR<ul style="list-style-type: none">◦ Autonomous I2C clock speed adjustments◦ Log TM from initialization phase◦ Handle low voltage levels

Period	Optional Tasks and goals (or not needed before integration)
Before launch	<ul style="list-style-type: none">• Make use of persistent TC queue• Elveti module for showing important HK• Timed-C fixes (remove bandaid, remove unused variables, fix task exit behavior, configure stack space)• SD-card switching



- Nanoprop software task
 - Finished draft, may or may not have been tested yet by Niklas.
 - Requires structural change and more TC
- Remote software update
 - Slow upload speeds
 - Elveti module somewhat unstable
- The HCC library deadlocks

