

COMP1203 - ARM & Assembly

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19/11/19

ARM Assembler

Arm Instruction Set

- Full instruction set: 32-bit
- “Thumb” instruction set: 16-bit
- Optimised for higher code density from C code
 - $\approx 65\%$ of full instruction set

ARM Registers

- 16x32-bit registers, **R0** to **R15**
- 3 special ones
 - **R15** - Program Counter (PC)
 - **R14** - Link Register (LR)
 - **R13** - Stack Pointer (SP)
- **CPSR** - Current Program Status Register

Instruction Set

Instruction	Explanation
mov r2, r1	r2 = r1
add r3, r1, r2	r3 = r1 + r2
B	Branch to label

TODO: rest of instructions mentioned in the presentation

Status Registers

TODO