

Sampling (see website for full instruction set)

Arithmetic

add $r_1, r_2, \text{Operand2}$
sub $r_1, r_2, \text{Operand2}$
mul r_1, r_2, r_3

Boolean

and $r_1, r_2, \text{Operand2}$
orr $r_1, r_2, \text{Operand2}$
eor $r_1, r_2, \text{Operand2}$

Comparison and Branching

cmp $r_1, \text{Operand2}$
beq label
bne label
bge label
blt label
b label

Moves

mov $r_1, \text{Operand2}$
movw $r_1, \text{imm16}$
movt $r_1, \text{imm16}$
moveq $r_1, \text{Operand2}$
movlt $r_1, \text{Operand2}$
movne $r_1, \text{Operand2}$
movge $r_1, \text{Operand2}$

Loads and Stores

ldr $r_1, \text{address}$ (various modes including: $[\text{reg}]$, $[\text{reg}, \#\text{expr}]$, where expr is -4095 to 4095)
str $r_1, \text{address}$

Invocation

bl label
push $\{r_n \dots r_m\}$
pop $\{r_n \dots r_m\}$