Assembler-level computer sketch
(All registers and memory locations are 4 bytes wide)

Register bank

R0	0x0006	A1	0x00001077
R1		A2	
R2		A3	
R3	0x0006	A4	
R4		V1	
R5		V2	
R6		V3	
R7		V4/WR	
R8		V5	
R9		V6/SB	
R10		V7/SL	
R11		V8/FP	
R12		IP	
R13	0x1064	SP	
R14		LR	
R15	0x0008	PC	

CSPR

N	Z	C	V
0	0	0	0

IR

MAR

MDR

Processor

Stack

Caller lr   0x0000007F

Caller r4

0x00001000

Data memory

0x00000000   0x0006

COMMENTS: