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

| | Register bar | nk | | Stack | 0.000000 | Data memory |
|------|--------------|----------------------|--------------------|-----------|-----------------|-------------|
| R0 | 0x000 | | 1 0x0000107 | | 0x0000007F : | |
| R1 | | | \2 | Caller r4 | <u></u> | |
| R2 | | A | ۸3 | <u> </u> | : : | |
| R3 \ | 0x000 | | ۸4 | | | |
| R4 | Caller r4 | $\overline{}$ \vee | ′ 1 | | | |
| R5 | | | /2 | | | |
| R6 | | \ | /3 | | | |
| R7 | | \ | /4/WR | | | |
| R8 | | \ | / 5 | | | |
| R9 | | | /6/SB | | | |
| R10 | | | /7/SL | | | |
| R11 | | V | /8/FP | | | |
| R12 | | | D | | | |
| R13 | 0x0068 | S | SP | | | |
| R14 | Caller Ir | L | .R | | | |
| R15 | 0x0012 | F | PC - | | | |
| | | | | | | |
| CSPR | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| 0 | 0 | 0 | 0 | | | |
| | | J | | | | |
| N | Z | С | V | | | |
| | | | | | | |
| | | | | | | |
| IR [| | | | | | |
| L | | | | | | |
| MAR | | | 0x0000100 | ` | 0000004 | |
| | | | | 0 | x0000004 | 6 |
| MDR | | | | | 0x00000000 | |
| | | | | | | |
| | | | | | | |

COMMENTS:

· · · · · · Processor · · · · · · · · ·