

The 6 68040 integer pipeline stages
Instruction Prefetch
 fetches instructions in blocks of 128 bits
 PC calculation and instruction decode
 takes 48 bits, decodes instruction, and can process 16, 32, or 48 bit instructions (including immediate operands)
EA calculation
 calculates EA for operands. This stage is internally microcoded.
 some EA calculations require more than one cycle.
EA fetching
 may perform a data memory access
Data execution
 performs operations, transferring results to write-back buffer
Write results back
 updates register set or data memory
 Note the control hazard between the EAF and WB stages for access to
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