

BRANCHES

Instructions 000-017 are the branch instructions for the background processor. Instructions 000 and 001 are exit type instructions and do not cause a branch. Instructions 006 and 007 modify the semaphore pointers and do not cause a branch. Instructions 004, 005, 010-017 are conditional type branch instructions. Instructions 002-005, 010-017 may be in-stack.

No branches performed : 000, 001, 006, 007
Conditional branches : 004, 005, 010-017
Maybe in-stack : 002-005, 010-017

The JA module issues the branch instructions. The IB module contains branch control and controls the instruction stack (IA). The IA module contains the instruction fields and the barrel tag ranks. The IA module transfers 64 bits of instruction data to the JA module along with a data ready. When the JA accepts the data it responds with a resume thus allowing the IA to output another word. See branch overview diagram.