Disassembler API

Team biscuit

# Overview

This document describes the blahblahblah

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# EA subroutines

The following list of subroutines includes the function performed, pre and post conditions, and a description of error flags to be set if errors are encountered. The state of all data and address registers will be shown in three tables corresponding to pre, post, and error conditions.

## ISMOVEB

Description – parses a known MOVE.B command’s source register, destination register, source mode, and destination mode into registers d6, d5, d4, and d3 respectively

Pre-conditions – A MOVE.B command has been identified and its corresponding word data in hex (not addressing data if it exists) has been moved to register d7. Clearing all registers should not be necessary, but you might want to play it safe.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| D7 | D6 | D5 | D4 | D3 | D2 | D1 | D0 |
| 1st word of MOVE.B machine code | Clr | Clr | Clr | Clr | Clr | Clr | Clr |

Post-conditions – MOVE.B instruction parsed into source register, source mode, destination register, destination mode and placed into corresponding data registers. If addressing modes used are absolute or immediate, pointers to their corresponding address in memory are stored in a4 and a5.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| D7 | D6 | D5 | D4 | D3 | D2 | D1 | D0 |
| 1st word of MOVE.B machine code | Source register, long, 3 bits | Destination register, long, 3 bits | Source mode, long, 3 bits | Destination mode, long, 3 bits | Clr | Clr | Clr |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| A6 | A5 | A4 | A3 | A2 | A1 | A0 |
| Points to next instruction to disassemble | Clr or points to address that IO must print | Clr or points to address that IO must print | Clr | Clr | Clr | Clr |

Error-conditions – If any mode or register used is incompatible or illegal, d2 will contain the error flag $BEEF in long format. All other registers are considered compromised and should be ignored.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| D6 | D5 | D4 | D3 | D2 | D1 | D0 |
| Clr | Clr | Clr | Clr | $BEEF | Clr | Clr |