ALU运算器模块测试结果记录表

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| **A= 703122427 B= 1404775099** | | | | |
| ALU\_OP | **运算方式** | Shift\_carry\_out，来自CPSR的CF、VF | F | **NZCV** |
| 0000 | F=A & B |  |  |  |
| 0001 | F=A ^ B |  |  |  |
| 0010 | F=A - B |  |  |  |
| 0011 | F=B - A |  |  |  |
| 0100 | F=A + B |  |  |  |
| 0101 | F=A + B +CF |  |  |  |
| 0110 | F=A - B + CF - 1 |  |  |  |
| 0111 | F=B - A + CF - 1 |  |  |  |
| 1000 | F=A |  |  |  |
| 1010 | F=A–B + 4 |  |  |  |
| 1100 | F=A | B |  |  |  |
| 1101 | F=B |  |  |  |
| 1110 | F=A & (~B) |  |  |  |
| 1111 | F=~B |  |  |  |

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| **A= 703122427 B= -1404775099** | | | | |
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| 0000 | F=A & B |  |  |  |
| 0001 | F=A ^ B |  |  |  |
| 0010 | F=A - B |  |  |  |
| 0011 | F=B - A |  |  |  |
| 0100 | F=A + B |  |  |  |
| 0101 | F=A + B +CF |  |  |  |
| 0110 | F=A - B + CF - 1 |  |  |  |
| 0111 | F=B - A + CF - 1 |  |  |  |
| 1000 | F=A |  |  |  |
| 1010 | F=A–B + 4 |  |  |  |
| 1100 | F=A | B |  |  |  |
| 1101 | F=B |  |  |  |
| 1110 | F=A & (~B) |  |  |  |
| 1111 | F=~B |  |  |  |

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| **A= B=** | | | | |
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| 0000 | F=A & B |  |  |  |
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| 0011 | F=B - A |  |  |  |
| 0100 | F=A + B |  |  |  |
| 0101 | F=A + B +CF |  |  |  |
| 0110 | F=A - B + CF - 1 |  |  |  |
| 0111 | F=B - A + CF - 1 |  |  |  |
| 1000 | F=A |  |  |  |
| 1010 | F=A–B + 4 |  |  |  |
| 1100 | F=A | B |  |  |  |
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| 1110 | F=A & (~B) |  |  |  |
| 1111 | F=~B |  |  |  |

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| 0000 | F=A & B |  |  |  |
| 0001 | F=A ^ B |  |  |  |
| 0010 | F=A - B |  |  |  |
| 0011 | F=B - A |  |  |  |
| 0100 | F=A + B |  |  |  |
| 0101 | F=A + B +CF |  |  |  |
| 0110 | F=A - B + CF - 1 |  |  |  |
| 0111 | F=B - A + CF - 1 |  |  |  |
| 1000 | F=A |  |  |  |
| 1010 | F=A–B + 4 |  |  |  |
| 1100 | F=A | B |  |  |  |
| 1101 | F=B |  |  |  |
| 1110 | F=A & (~B) |  |  |  |
| 1111 | F=~B |  |  |  |

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| **A= B=** | | | | |
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| 0000 | F=A & B |  |  |  |
| 0001 | F=A ^ B |  |  |  |
| 0010 | F=A - B |  |  |  |
| 0011 | F=B - A |  |  |  |
| 0100 | F=A + B |  |  |  |
| 0101 | F=A + B +CF |  |  |  |
| 0110 | F=A - B + CF - 1 |  |  |  |
| 0111 | F=B - A + CF - 1 |  |  |  |
| 1000 | F=A |  |  |  |
| 1010 | F=A–B + 4 |  |  |  |
| 1100 | F=A | B |  |  |  |
| 1101 | F=B |  |  |  |
| 1110 | F=A & (~B) |  |  |  |
| 1111 | F=~B |  |  |  |

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| **A= B=** | | | | |
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| 0001 | F=A ^ B |  |  |  |
| 0010 | F=A - B |  |  |  |
| 0011 | F=B - A |  |  |  |
| 0100 | F=A + B |  |  |  |
| 0101 | F=A + B +CF |  |  |  |
| 0110 | F=A - B + CF - 1 |  |  |  |
| 0111 | F=B - A + CF - 1 |  |  |  |
| 1000 | F=A |  |  |  |
| 1010 | F=A–B + 4 |  |  |  |
| 1100 | F=A | B |  |  |  |
| 1101 | F=B |  |  |  |
| 1110 | F=A & (~B) |  |  |  |
| 1111 | F=~B |  |  |  |

桶形移位器和ALU运算器模块联调实验记录表

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| SHIFT\_OP | 移位次数Shift\_Num | 被移位数据  Shift\_Data | ALU\_OP | **A** | 来自CPSR的CF、VF | F | **NZCV** |
| 0 | 0 | 103833526 | 0 | 1818587645 |  | 0x04205164 | 0000 |
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