

# INCF

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| INCF             | Increment f   |      |      |      |      |
|------------------|---|------|------|------|------|
| Syntax:          | [ <i>label</i> ] INCF f [,d [,a]  |      |      |      |      |
| Operands:        | $0 \leq f \leq 255$<br>$d \in [0,1]$<br>$a \in [0,1]$   |      |      |      |      |
| Operation:       | $(f) + 1 \rightarrow \text{dest}$   |      |      |      |      |
| Status Affected: | C, DC, N, OV, Z   |      |      |      |      |
| Encoding:        | <table><tr><td>0010</td><td>10da</td><td>ffff</td><td>ffff</td></tr></table>  | 0010 | 10da | ffff | ffff |
| 0010             | 10da  | ffff | ffff |      |      |
| Description:     | The contents of register 'f' are incremented. If 'd' is 0, the result is placed in W. If 'd' is 1, the result is placed back in register 'f' (default). If 'a' is 0, the Access Bank will be selected, overriding the BSR value. If 'a' = 1, then the bank will be selected as per the BSR value (default). |      |      |      |      |
| Words:           | 1   |      |      |      |      |
| Cycles:          | 1   |      |      |      |      |

Q Cycle Activity:

| Q1     | Q2                | Q3           | Q4                   |
|--------|-------------------|--------------|----------------------|
| Decode | Read register 'f' | Process Data | Write to destination |

Example: INCF CNT, 1, 0

Before Instruction

|     |   |      |
|-----|---|------|
| CNT | = | 0xFF |
| Z   | = | 0    |
| C   | = | ?    |
| DC  | = | ?    |

After Instruction

|     |   |      |
|-----|---|------|
| CNT | = | 0x00 |
| Z   | = | 1    |
| C   | = | 1    |
| DC  | = | 1    |

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