## **LFSR**

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## LFSR Load FSR

Syntax: [label] LFSR f,k

Operands:  $0 \le f \le 2$ 

 $0 \le k \le 4095$ 

Operation:  $k \rightarrow FSRf$ 

Status Affected: None

Encoding: 1110 1110 00ff k<sub>11</sub>kkk 1111 0000 k<sub>7</sub>kkk kkkk

Description: The 12-bit literal 'k' is loaded into

the file select register pointed to

by 'f'.

Words: 2 Cycles: 2

Q Cycle Activity:

| Q1     | Q2           | Q3      | Q4            |
|--------|--------------|---------|---------------|
| Decode | Read literal | Process | Write         |
|        | 'k' MSB      | Data    | literal 'k'   |
|        |              |         | MSB to        |
|        |              |         | FSRfH         |
| Decode | Read literal | Process | Write literal |
|        | 'k' LSB      | Data    | 'k' to FSRfL  |

Example: LFSR 2, 0x3AB

After Instruction

 $\begin{array}{lll} \mathsf{FSR2H} & = & \mathsf{0x03} \\ \mathsf{FSR2L} & = & \mathsf{0xAB} \end{array}$ 

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