PRESENT NEXT
INPUTS STATE STATE OUTPUTS

| XR > 0 | XR ≥ YR | D <sub>1</sub> | D <sub>0</sub> | D <sub>1</sub> <sup>+</sup> | D <sub>0</sub> <sup>+</sup> | SUBRACT | SWAP | SELECT<br>XY | LOAD<br>XR | LOAD<br>YR |
|--------|---------|----------------|----------------|-----------------------------|-----------------------------|---------|------|--------------|------------|------------|
| 0      | X       | 0              | 0              | 1                           | 1                           | 0       | 0    | 1            | 1          | 1          |
| 0      | X       | 0              | 1              | 1                           | 0                           | 0       | 1    | 0            | 1          | 1          |
| 0      | X       | 1              | 0              | 1                           | 1                           | 1       | 0    | 0            | 1          | 0          |
| 0      | X       | 1              | 1              | 1                           | 1                           | 0       | 0    | 0            | 0          | 0          |
| 1      | 0       | 0              | 0              | 0                           | 1                           | 0       | 0    | 1            | 1          | 1          |
| 1      | 0       | 0              | 1              | 1                           | 0                           | 0       | 1    | 0            | 1          | 1          |
| 1      | 0       | 1              | 0              | 0                           | 1                           | 1       | 0    | 0            | 1          | 0          |
| 1      | 0       | 1              | 1              | 1                           | 1                           | 0       | 0    | 0            | 0          | 0          |
| 1      | 1       | 0              | 0              | 1                           | 0                           | 0       | 0    | 1            | 1          | 1          |
| 1      | 1       | 0              | 1              | 1                           | 0                           | 0       | 1    | 0            | 1          | 1          |
| 1      | 1       | 1              | 0              | 1                           | 0                           | 1       | 0    | 0            | 1          | 0          |
| 1      | 1       | 1              | 1              | 1                           | 1                           | 0       | 0    | 0            | 0          | 0          |

X represents 0 or 1