Timing

For reading inputs

$$1 + (n/2) * n * m$$

MAYO1 => $1+(33*66*64) = 139{,}393$ cycles => 1.4 ms
MAYO1 => $1+(39*78*64) = 194{,}689$ cycles => 1.95 ms

For calculating i.e, Execution

$1 + k((n+2)m+2) \Rightarrow i=0$
$1 + (k-1)((n+2)m+2) \Rightarrow i=1$
$1 + k((n+2)m+2) \Rightarrow i=2$
:
:
:
:
$1 + 1((n+2)m+2) \Rightarrow i=k-1$

On adding everything and also the S0 (idle) state,

$$\Rightarrow k + k(k+1)((n+2)m+2)/2 + 1$$

$$\Rightarrow \mathbf{k\,[\,(k+1)((\,(n/2)+1)\,m+1\,)+1]+1}$$

MAYO1

ET (cycles) = $9[(9+1)((\,(66/2)+1)\,64+1\,)+1]+1 = 9[10*2177+1]+1 = 9*21771+1 = 195940$ cycles
ET (ns) = ET (cycles) * $T_{\text{min-clk}} = 195940 * 8.86$ ns = 1736028.4 ns = 1.74 ms
Throughput (operations/sec) = 1/ET(s) = $10^3/1.74$ = 575 operations/sec

MAYO2

ET (cycles) = $4[(4+1)((\,(78/2)+1)\,64+1\,)+1]+1 = 4[5*2561+1]+1 = 9*12806+1 = 51225$ cycles
ET (ns) = ET (cycles) * $T_{\text{min-clk}} = 51225 * 10.443$ ns = 523775.6 ns = 0.52 ms
Throughput (operations/sec) = 1/ET(s) = $10^3/0.52$ = 1923 operations/sec