|  |  |  |  |
| --- | --- | --- | --- |
| sort\_max | | | |
| Strategy implementation:  **Performance\_Explore** | | | |
| frequency: ***f*** **= 500 MHz** | | | |
| N = 7, M = 32 (*photo 1, 2*) | | | |
| Utilization | | | |
| LUT | 25070 | W = 32 |  |
| FF | 7628 |  |  |
| LUT\_inst | 788 (1 stage) |  |  |
| Timing Summary | | | |
| Setup | | Hold | |
| WNS | -13,668 | WHS | 0,041 |
| TNS | -73347,132 | THS | 0 |
| N = 8, M = 16 (*photo 3, 4*) | | | |
| Utilization | | | |
| LUT | 7004 |  |  |
| FF | 2314 |  |  |
| LUT\_inst | 459 (1 stage) |  |  |
| Timing Summary | | | |
| Setup | | Hold | |
| WNS | -8,186 | WHS | 0,621 |
| TNS | -14498,413 | THS | 0 |
|  | N = 9, M = 8 (*photo 5, 6*) | |  |
| Utilization | | | |
| LUT | 1974 |  |  |
| FF | 736 |  |  |
| LUT\_inst | 260 (1 stage) |  |  |
| Timing Summary | | | |
| Setup | | Hold | |
| WNS | -6,025 | WHS | 0,621 |
| TNS | -3138,786 | THS | 0 |
| N = 16, M = 64 (*photo 7, 8*) | | | |
| Utilization | | | |
| LUT |  |  |  |
| FF |  |  |  |
| LUT\_inst |  |  |  |
| Timing Summary | | | |
| Setup | | Hold | |
| WNS |  | WHS |  |
| TNS |  | THS |  |

|  |  |  |  |
| --- | --- | --- | --- |
| sort\_min | | | |
| Strategy implementation:  **Performance\_Explore** | | | |
| frequency: ***f*** **= 500 MHz** | | | |
| N = 7, M = 32, W = 32 (*photo 9, 10*) | | | |
| Utilization | | | |
| LUT | 25127 |  |  |
| FF | 7627 |  |  |
| LUT\_inst | 671 (1 stage) |  |  |
| Timing Summary | | | |
| Setup | | Hold | |
| WNS | -12,579 | WHS | 0,035 |
| TNS | -69636,533 | THS | 0 |
| N = 8, M = 16, W = 16 (*photo 11, 12*) | | | |
| Utilization | | | |
| LUT | 7034 |  |  |
| FF | 2316 |  |  |
| LUT\_inst | 375 (1 stage) |  |  |
| Timing Summary | | | |
| Setup | | Hold | |
| WNS | -8,245 | WHS | 0,043 |
| TNS | -14671,142 | THS | 0 |
|  | N = 9, M = 8, W = 8 (*photo 13, 14*) | |  |
| Utilization | | | |
| LUT | 2214 |  |  |
| FF | 807 |  |  |
| LUT\_inst | 256 (1 stage) |  |  |
| Timing Summary | | | |
| Setup | | Hold | |
| WNS | -5,629 | WHS | 0,042 |
| TNS | -3231,633 | THS | 0 |
| N = 16, M = 64 (*photo 15, 16*) | | | |
| Utilization | | | |
| LUT |  |  |  |
| FF |  |  |  |
| LUT\_inst |  |  |  |
| Timing Summary | | | |
| Setup | | Hold | |
| WNS |  | WHS |  |
| TNS |  | THS |  |

