|  |  |  |  |
| --- | --- | --- | --- |
| mm / Not Taken | | | |
| ULA’s | **Nº de ciclos** | **IPC** | **CPI** |
| 1 | 8147711 | 0,9454 | 1,0578 |
| 2 | 4941540 | 1,5587 | 0,6416 |
| 4 | 4691006 | 1,6420 | 0,6090 |
| 6 | 4691006 | 1,6420 | 0,6090 |

Simulador: SimpleScalar Sim-Outorder

Benchmark: mm

a. Simular a execução das aplicações conforme as seguintes configurações :

|  |  |  |  |
| --- | --- | --- | --- |
| mm / Bimodal (tabela de 2 entradas) | | | |
| ULA’s | **Nº de ciclos** | **IPC** | **CPI** |
| 1 | 7459018 | 1,0326 | 0,9684 |
| 2 | 4213103 | 1,8282 | 0,5470 |
| 4 | 3823559 | 2,0145 | 0,4964 |
| 6 | 3823559 | 2,0145 | 0,4964 |

|  |  |  |  |
| --- | --- | --- | --- |
| mm / Bimodal (tabela de 64 entradas) | | | |
| ULA’s | **Nº de ciclos** | **IPC** | **CPI** |
| 1 | 7458795 | 1,0327 | 0,9684 |
| 2 | 4212717 | 1,8284 | 0,5469 |
| 4 | 3823189 | 2,0147 | 0,4964 |
| 6 | 3823189 | 2,0147 | 0,4964 |

|  |  |  |  |
| --- | --- | --- | --- |
| mm / Bimodal (tabela de 256 entradas) | | | |
| ULA’s | **Nº de ciclos** | **IPC** | **CPI** |
| 1 | 7458715 | 1,0327 | 0,9684 |
| 2 | 4212579 | 1,8284 | 0,5469 |
| 4 | 3823048 | 2,0148 | 0,4963 |
| 6 | 3823048 | 2,0148 | 0,4963 |

|  |  |  |  |
| --- | --- | --- | --- |
| mm / Perfeito | | | |
| ULA’s | **Nº de ciclos** | **IPC** | **CPI** |
| 1 | 7441399 | 1,0351 | 0,9661 |
| 2 | 4200446 | 1,8337 | 0,5453 |
| 4 | 3818222 | 2,0173 | 0,4957 |
| 6 | 3818222 | 2,0173 | 0,4957 |
|  |  |  |  |

Explicação dos resultados obtidos:

Simulador: SimpleScalar Sim-Outorder

Benchmarks: crc

a, Simular a execução das aplicações conforme as seguintes configurações :

|  |  |  |  |
| --- | --- | --- | --- |
| crc / Not Taken | | | |
| ULA’s | **Nº de ciclos** | **IPC** | **CPI** |
| 1 | 88772 | 0,6809 | 1,4686 |
| 2 | 81595 | 0,7408 | 1,3498 |
| 4 | 80681 | 0,7492 | 1,3347 |
| 6 | 80681 | 0,7492 | 1,3347 |

|  |  |  |  |
| --- | --- | --- | --- |
| crc / Bimodal (tabela de 2 entradas) | | | |
| ULA’s | **Nº de ciclos** | **IPC** | **CPI** |
| 1 | 71130 | 0,8498 | 1,1767 |
| 2 | 47532 | 1,2717 | 0,7863 |
| 4 | 44405 | 1,3613 | 0,7346 |
| 6 | 44405 | 1,3613 | 0,7346 |

|  |  |  |  |
| --- | --- | --- | --- |
| crc / Bimodal (tabela de 64 entradas) | | | |
| ULA’s | **Nº de ciclos** | **IPC** | **CPI** |
| 1 | 70340 | 0,8594 | 1,1636 |
| 2 | 46507 | 1,2998 | 0,7694 |
| 4 | 43151 | 1,4008 | 0,7139 |
| 6 | 43151 | 1,4008 | 0,7139 |

|  |  |  |  |
| --- | --- | --- | --- |
| crc / Bimodal (tabela de 256 entradas) | | | |
| ULA’s | **Nº de ciclos** | **IPC** | **CPI** |
| 1 | 70315 | 0,8597 | 1,1632 |
| 2 | 46474 | 1,3007 | 0,7688 |
| 4 | 43118 | 1,4019 | 0,7133 |
| 6 | 43118 | 1,4019 | 0,7133 |

|  |  |  |  |
| --- | --- | --- | --- |
| crc / Perfeito | | | |
| ULA’s | **Nº de ciclos** | **IPC** | **CPI** |
| 1 | 62459 | 0,9678 | 1,0333 |
| 2 | 36973 | 1,6349 | 0,6116 |
| 4 | 32855 | 1,8398 | 0,5435 |
| 6 | 32855 | 1,8398 | 0,5435 |

Explicação dos resultados obtidos:

Simulador: SimpleScalar Sim-Outorder

Benchmarks: fft1

a, Simular a execução das aplicações conforme as seguintes configurações :

|  |  |  |  |
| --- | --- | --- | --- |
| fft1 / Not Taken | | | |
| ULA’s | **Nº de ciclos** | **IPC** | **CPI** |
| 1 | 18306 | 0,5072 | 1,9716 |
| 2 | 15996 | 0,5805 | 1,7228 |
| 4 | 1,5588 | 0,5957 | 1,6788 |
| 6 | 1,5588 | 0,5957 | 1,6788 |

|  |  |  |  |
| --- | --- | --- | --- |
| fft1 / Bimodal (tabela de 2 entradas) | | | |
| ULA’s | **Nº de ciclos** | **IPC** | **CPI** |
| 1 | 16274 | 0,5705 | 1,7527 |
| 2 | 13431 | 0,6913 | 1,4465 |
| 4 | 12986 | 0,7150 | 1,3986 |
| 6 | 12986 | 0,7150 | 1,3986 |

|  |  |  |  |
| --- | --- | --- | --- |
| fft1 / Bimodal (tabela de 64 entradas) | | | |
| ULA’s | **Nº de ciclos** | **IPC** | **CPI** |
| 1 | 16314 | 0,5691 | 1,7570 |
| 2 | 13432 | 0,6913 | 1,4466 |
| 4 | 12989 | 0,7148 | 1,3989 |
| 6 | 12989 | 0,7148 | 1,3989 |

|  |  |  |  |
| --- | --- | --- | --- |
| fft1 / Bimodal (tabela de 256 entradas) | | | |
| ULA’s | **Nº de ciclos** | **IPC** | **CPI** |
| 1 | 16339 | 0,5683 | 1,7597 |
| 2 | 13419 | 0,6919 | 1,4452 |
| 4 | 12968 | 0,7160 | 1,3967 |
| 6 | 12968 | 0,7160 | 1,3967 |

|  |  |  |  |
| --- | --- | --- | --- |
| fft1 / Perfeito | | | |
| ULA’s | **Nº de ciclos** | **IPC** | **CPI** |
| 1 | 15228 | 0,6097 | 1,6401 |
| 2 | 12220 | 0,7598 | 1,3161 |
| 4 | 11772 | 0,7887 | 1,2679 |
| 6 | 11772 | 0,7887 | 1,2679 |