**Vergelijking Specificaties**

|  |  |  |  |
| --- | --- | --- | --- |
| **Specificatie** | **Zedboard** | **Ultra96** | **Jetson Nano** |
| Fabrikant | Xilinx | Xilinx | NVIDIA |
| SoC | Zynq-7000 SoC | Zynq UltraScale+ MPSoc | Jetson Nano |
| CPU | Dual-core ARM Cortex-A9 MPCore met CoreSight | Combinatie van:   * Quad-core ARM Cortex-A53 * Dual-core Cortex-R5 | Quad-Core ARM Cortex-A57 64-bit |
| GPU | / | Mali-400 MP2 | NVIDIA Maxwell met 128 CUDA cores |
| PL | Artix-7 | FinFET+ | / |
| Memory | 512 MB DDR3 | 2 GB LPDDR4 | 4 GB LPDDR4 |
| Kloksnelheid | 1,5 GHz | 1,5 GHz | 1,43 GHz |
| Video Encoding/Decoding | H.264 | H.264/H.265 | H.264/H.265 |
| Power (V/A) | 12V/5A | 12V/4.8A | 5V/4A |
| Power efficiency (Resnet-50) | 17 Gops/W[[1]](#footnote-1) | 14 Gops/W[[2]](#footnote-2) | 21,2 – 38,5 Gops/W[[3]](#footnote-3) |
| Prijs SoC | €115,48[[4]](#footnote-4) | €404,30[[5]](#footnote-5) | €136,17[[6]](#footnote-6) |

1. <https://www.researchgate.net/publication/321511022_Neuraghe_Exploiting_CPU-FPGA_synergies_for_efficient_and_flexible_CNN_inference_acceleration_on_zynQ_SoCs> [↑](#footnote-ref-1)
2. <https://logictronix.com/machine-learning-with-fpga/dpu-trd-for-zcu104/> [↑](#footnote-ref-2)
3. <https://developer.nvidia.com/embedded/jetson-agx-xavier-dl-inference-benchmarks> [↑](#footnote-ref-3)
4. <https://www.digikey.be/product-detail/en/xilinx-inc/XC7Z020-1CLG484C/122-1850-ND/3925759> [↑](#footnote-ref-4)
5. <https://www.digikey.com/product-detail/en/xilinx-inc/XCZU3EG-1SFVC784E/XCZU3EG-1SFVC784E-ND/7034561?fbclid=IwAR2z_A6JG1rJnAdI5M7uQOSmK8Juv28zKpx_0YkLtMBSDCK8wq9TkZ70fvU> [↑](#footnote-ref-5)
6. <https://www.arrow.com/en/products/900-13448-0020-000/nvidia> [↑](#footnote-ref-6)