



BrisbaneSilicon

Lumorphix



Lumorphix

NOTE: specifications are based on AMD / Xilinx 28nm fabric, unless otherwise indicated.

Specifications

Footprint [i]

1750|Slice LUTs
1800|Slice Registers
5|Block RAM

Performance

200|MHz FMax
500|MHz FMax [ii]

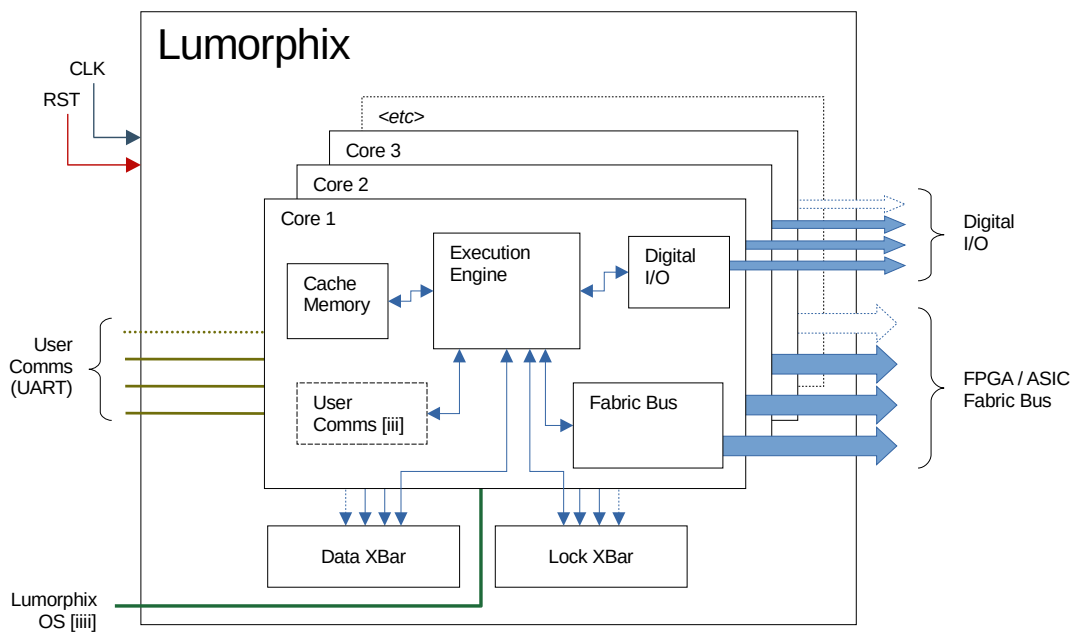
Features

- Highly Configurable Processor IP
- Hosts up to 8 x heterogeneous cores
- Native execution of Lua scripting language
- Customized, full-featured, Lua API
- Support for various digital I/O protocols
- FPGA fabric bus
- Inter-core communication and synchronization
- Hardware Timers, Watchdog, Interrupts

[i] Footprint is configuration dependent, information provided is absolute minimum.

[ii] AMD / Xilinx 16nm fabric

IP Core Block Diagram



[iii] It is possible to instantiate only a single user comms module, external to Lumorphix

[iiii] Essentially a read-only bus. Could be connected to a ROM, Flash XIP device etc.

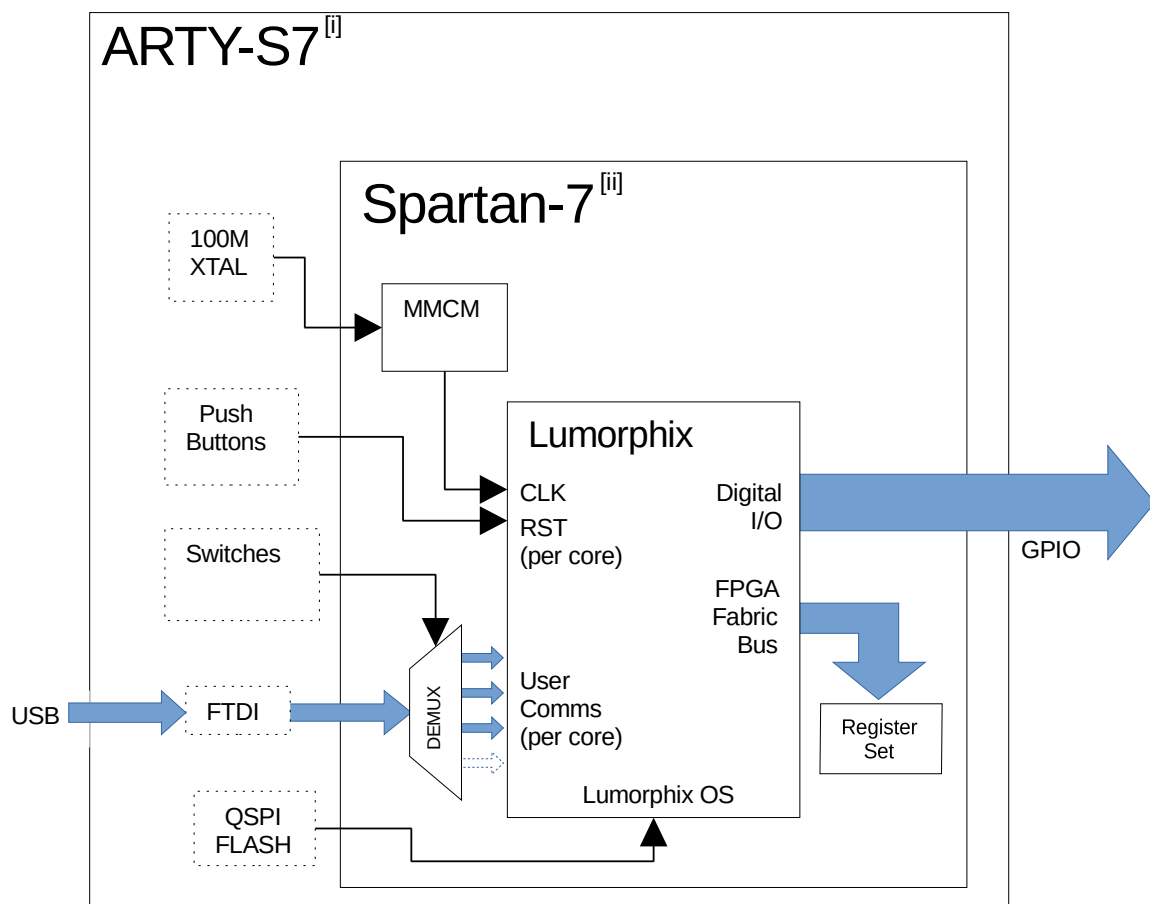


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Example Project 1: Block Diagram

NOTE: as of Q1 2025 Lumorphix is only available as a Beta Release, so the example project (IP Core evaluation) may not yet be available. See the product documentation for instructions related to evaluating a Beta Release.



[i] The suite of example projects support a variety of hardware platforms, not only ARTY-S7.

[ii] The suite of example projects support a variety of FPGA variants, not only Spartan-7.

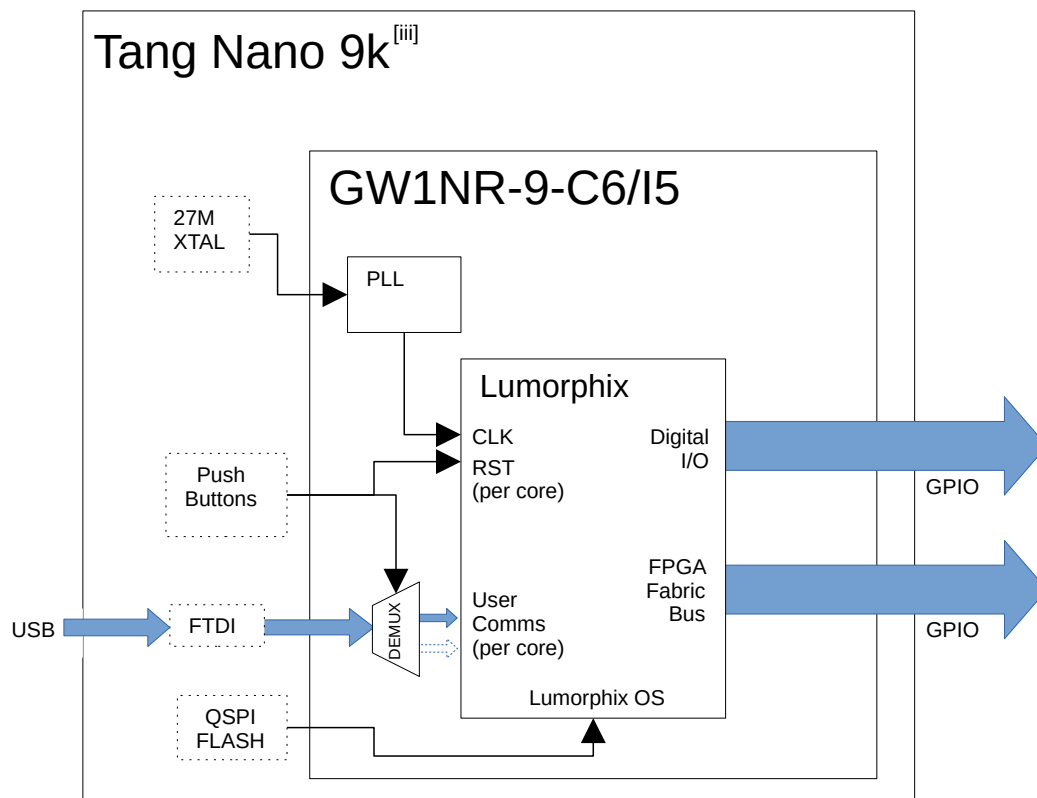


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Example Project 2: Block Diagram

NOTE: as of Q1 2025 Lumorphix is only available as a Beta Release, so the example project (IP Core evaluation) may not yet be available. See the product documentation for instructions related to evaluating a Beta Release.



[iii] The suite of example projects support a variety of hardware platforms, not only Tang Nano 9.