

KAL - Large IP Cores:

Verification IP:

- PCIe VIP
- NVM VIP
- eMMC VIP
- DDR 2/3/4/5 VIP
- LPDDR VIP
- HDMI VIP
- UniPro VIP
- M-PHY VIP
- CAN/CANFD VIP
- I2C VIP

Memory Controllers:

- **SD/SDIO 2.0/3.0 Controller**
- SDRAM Controller
- **DDR/DDR2/DDR3 SDRAM Controller**
- NAND Flash Controller
- Flash/EEPROM/SRAM Controller
- PCMCIA/CompactFlash Host Adapter
- PCMCIA/CompactFlash Slave Controller

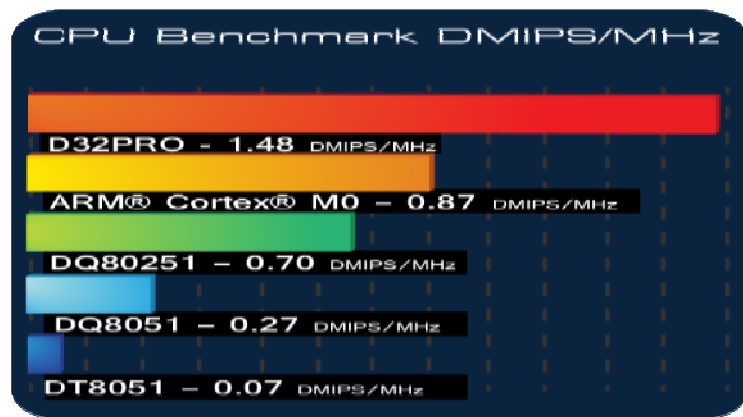
CPU Cores:

- **32 bit - NEW**
- **8 bit - 8051**
- 8 bit- HC68HC11
- 8 bit - PIC Processor
- 8 bit – Z80
- 16 bit – D6800

Clock Synchronization:

- IEEE 1588 Slave
- IEEE 1588 Master
- IEEE 1588

D32PRO & the mysteries of 32-bit IP Cores



There's no discussion that the pipelining is a "must be" in a modern CPU (especially in 32-bit bitters). Digital Core Design proved its abilities in the "pipeline area" with the DQ80251, world's fastest 8051 IP Core. That's why it would be a crime not to use such a experience in our D32PRO, 32-bit & royalty-free CPU.

Master/Slave

- IEEE 1588 PTP Stack
- IEEE 1588 L2/L3 Solution

Peripherals:

- HDLC/SDLC
- Smart Card Reader Unit
- EEPROM SPI Ctrl
- LCD Ctrl
- Floating Point Unit
- I2C Master/Slave
- SPI Master/Slave
- CAN bus
- LIN bus
- Programmable Peripheral Interface
- UART, UART with FIFO
- PWM
- Timer 8254
- Programmable Timer
- Interrupt Controller
- Ethernet Controller 10/100/1000 BaseT
- DMA Controller
- USB 1.0/2.0 Host/Slave
- On Chip Bus Analyzer

PCI Bus Controllers and Peripherals:

- PCI Express
- PCI-X Host Bridge Master/Target
- PCI Host Bridge Master/Target
- PCI-PCI Bridge
- PCI-ISA Bridge
- PCI Bus Arbiter

Modulation:

- ADPSM

AHB/APB Peripherals:

- AHB Bus Master/Slave
- APB Bus Master/Slave
- AHB/AXI DMA Controller
- AXI Bus Master/Slave

Analog IP Cores:

D32PRO's variable pipeline ensures ultra low power consumption and high performance while retaining a reasonable maximum clock frequency. The IP Core itself has been designed as a universal and fully configurable CPU, ipso facto suitable for a great variety of target applications. Various enhancements like e.g. optimization of the maximal clock frequency to data path delays, seems to be the most significant. As an effect, the D32PRO copes excellent with many jumps in the code, but also it executes smoothly homogeneous code, like arithmetic operations. All of that wouldn't be possible without effective variable pipelining architecture.

KAL is representing DCD.

www.dcd.pl

www.KALtech.co.il

We are looking forward to hear from you.
Contact us for more information.

- Analog IP cores (ADC, DAC, PLL,) are available – Please contact us.
- We are expert in custom analog IP

[Contact us for data sheet](#)

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Until the next eNews,

Thanks you for your attention.

KAL