

IP Cores Offering by KAL's Partners:

The combination of leading ASIC knowledge and customer ASIC project that we have done and doing in present, leading us to look for and to partnered with the leading IP vendors. Our Vendors offering leading IP for SOC (System-On-Chip) design for high speed performance, low power demand and small foot print.

Digital IP cores:

CPU Cores:

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

Automotive:

- CAN/CAN-FD
- MultiCAN
- FlexCAN
- Lin
- FlexRay

Peripherals:

- JTAG/cJTAG
- USB 2.0/3.0
- LCD Controller
- HDLC/SDLC
- Smart Card Reader
- EEPROM SPI Ctrl
- Floating Point Unit
- I2C/I3C Master/Slave
- SPI Master/Slave
- Programmable Peripheral Interface
- UART, UART with FIFO
- PWM
- Timer 8254
- Programmable Timer
- Interrupt Controller
- 10/100/1000 Ethernet Controller

Military/Aviation:

- MIL-STD-1533

Memory Controllers:

- DDR2/DDR3 Controller
- LPDDR Controller
- SDRAM DIMM Controller
- SD/SDIO 2.0/3.0 Controller – eMMC support
- SDRAM Controller
- NAND Flash Controller
- Flash/EEPROM/SRAM Controller
- PCMCIA/CompactFlash Host Adapter
- PCMCIA/CompactFlash Slave Controller
- *Single/Multiport AHB/AXI/Other to all controllers*

Video/Image:

- H.264 Encoder
- H.264 Codec
- JPEG Encoder
- JPEG Decoder

Clock Synchronization:

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

AMBA Peripherals:

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



Verification IP Cores (System Verilog):

- High Speed IOs
- USB
- Memory & Embedded Storage
- SSD/HDD
- Multimedia
- Networking
- Automotive
- Control Bus
- Mobile

PCI Bus Controllers and Peripherals:

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

PowerPC CPU Interface:

- Power PC Bus Master
- PowerPC to PCI Host bridge
- PowerPC Bus Arbiter
- PowerPC Bus Slave

Code Modulation:

- ADPCM

Analog IP cores:

We are specialized in high precision analog IP per the customer specification, up to 7nm

