

## 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,
- 8 bit - 8051 Pipelined
- **8 bit - 8051 Quad-Pipelined Ultra High Performance**
- 8 bit - PIC Processor
- 8 bit- HC68HC11
- 8 bit - 8051, 8051 Pipelined
- 8 bit – Z80
- 16 bit – D6800

#### Peripherals:

- LCD Controller
- HDLC/SDLC
- Smart Card Reader
- EEPROM SPI Ctrl
- Floating Point Unit
- I2C Master/Slave
- SPI Master/Slave
- CAN/LIN bus
- Programmable Peripheral Interface
- UART, UART with FIFO
- PWM
- Timer 8254
- Programmable Timer
- Interrupt Controller
- 10/100/1000 Ethernet Controller

#### 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*

#### USB Controllers:

- **USB 2.0**
- **USB 3.0**

#### Clock Synchronization:

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

#### Verification IP Cores:

- **PCIe**
- **USB**
- **AMBA**
- **Memory**
- **Embedded Storage**
- **Multimedia**
- **Networking**

### AHB Peripherals:

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

### Code Modulation:

- ADPCM

### Analog IP cores:

We are specialized in non standard analog IP, custom made per the customer specification.  
0.6u – 40nm



### 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