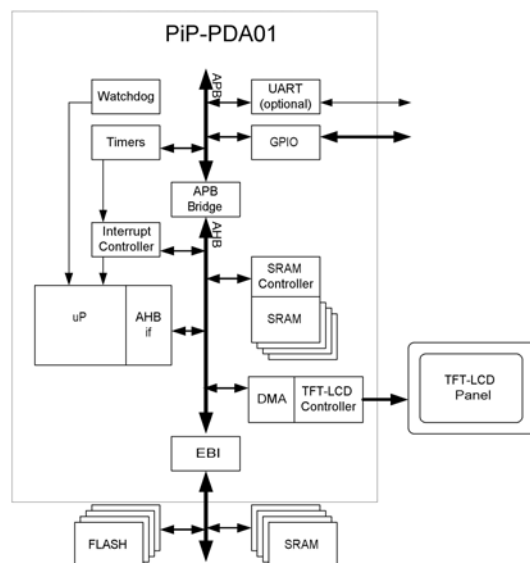


## Features:

- *Integrated PDA Verilog SOC Reference Design.*
- *ARM AHB Based Platform*
- *Includes all functions needed to run PDA software applications.*
- *TFT LCD Controller*
  - *256 color and true color support.*
- *RTOS Support*
  - *Nucleus Plus RTOS ported to PiP-PDA01.*
- *FPGA or ASIC*



## Overview

SoC Solutions' **PiP-PDA01** Personal Digital Assistant (PDA) platform was designed for handheld computers, organizers, display devices and Personal Digital Assistants that use color TFT-LCD type display panels. **PiP-PDA01 Pre-integrated IP**<sup>TM</sup> is a pre-verified hardware/software platform (or SOC reference design) that jumpstarts your PDA development.

The **Pre-integrated IP**<sup>TM</sup> is an ARM AHB based integrated Verilog SOC design combined with an integrated software suite. The SoC contains the basic hardware functions needed to run a real time operating system. Along with the hardware, the **Pre-integrated IP**<sup>TM</sup> includes all the software device drivers and boot code needed to start software application development right away.

The Color TFT-LCD Controller supports 256 colors using 8bit pixel data and a 256-color palette, or true color using direct 24bit pixel serialization. The TFT-LCD Controller output can also support VGA monitors using an external RAMDAC.

## Software

The software development tools supported are ARM ADS and SoC-RDS01 Rapid Development System from Avnet Design Services.

## Hardware

The **PiP-PDA01** is targeted for FPGA or ASIC SOC's. The **PiP-PDA01** Verilog IP is fully tested and extensive system level test bench is available in C/C++ and Verilog.

**PiP-PDA01** contains:

TFT LCD Controller  
 Interrupt Controller  
 SRAM Controller  
 Timers

UARTs  
 External Bus Interface  
 Watchdog