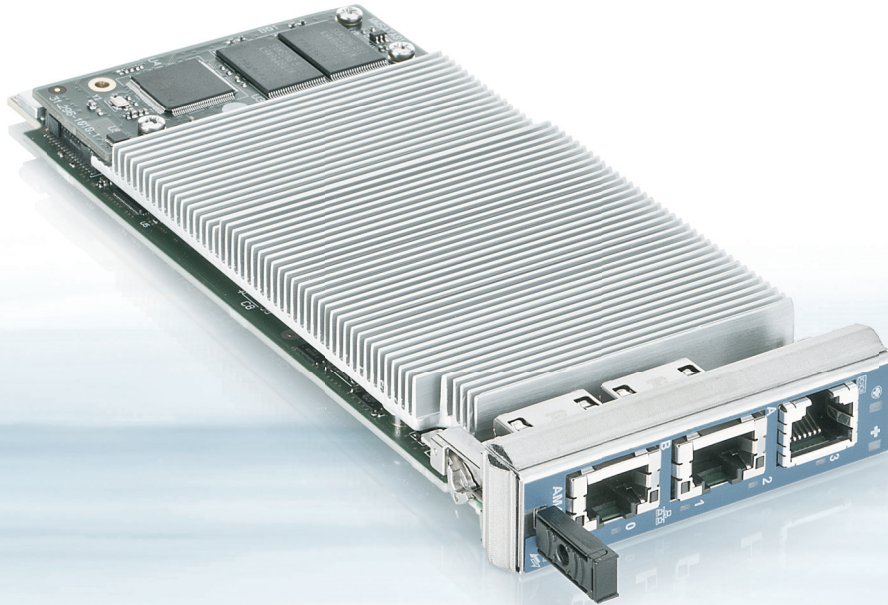


Linux BSP D0C01 FOR AM4150



Linux BSP D0C01 FOR AM4150

- ▶ embedded root file system
- ▶ drivers, libraries, example applications for board specific devices
- ▶ supports Kontron Soft-Config base configuration (SCONF_BASE_X)
- ▶ all sources included



LINUX BSP DOC01 FOR AM4150

This Kontron BSPs is designed to get customers started immediately with application development instead of first getting involved with BSP integration or hardware bring-up issues. Support of board specific devices and interfaces has been added to the BSP to achieve the full benefit of the functions provided by the hardware.

Board hardware configuration is typically carried out by setting jumpers or DIP switches on the board. Due to the high flexibility in the offered fabric configuration of the Freescale™ QorIQ processors and the routing possibilities of the board(s) the Kontron Soft-Config has been introduced. The Kontron Soft-Config carries out board configuration using software provided settings that can be selected in U-Boot in the form of SCONF_BASE settings. These settings are applied by the hardware logic to the reset configuration word (RCW) to define the SerDes lane assignments and multiplexing (SRDS_PRTCL) during early board startup.

Monitoring of assorted onboard temperature conditions, board voltages and the power supply status is provided via IPMI.

A rich set of Linux application is provided. These root file applications can be selected by the use of a pre-configured meta package in yocto or by editing an appropriate configuration file. This is being described in the "Getting Started" manual of the yocto based SDK.

The package contains a guideline, describing Kontron specific additions to the yocto based SDK and a complete API description for those, who want to use Kontron specific HW features within their applications.

▶ TECHNICAL INFORMATION

LINUX KERNEL	Kernel version 3.0.6
CROSS COMPILER TOOL CHAIN	gcc version 4.5.55
CROSS DEVELOPMENT PLATFORM	Freescale™ SDK V1.2 e5500 (yocto based)
EMBEDDED LINUX ROOT FILE SYSTEM	Built with Freescale™ SDK V1.2
MULTI PROCESSING	Symmetric Multi Processing (SMP)
ETHERNET	10/100/1000 BASE-T DPAA TSECs 10 Gigabit Ethernet / XAUI
PCI EXPRESS	Root Complex
IPMI	Sensor Reading System Monitoring Graceful Shutdown
BOOT DEVICES	Network NAND Flash SDHC Flash Card
MISCELLANEOUS DEVICES	Real Time Clock Hardware Watchdog (RESET, IRQ, Timer, Dual-Stage) EEPROM for user data storage
STATUS INDICATION	General Purpose LED block

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