

Product datasheet

HW-6467-CORE High Definition Video Processor Module

Overview

Synesis' HW-6467-CORE module is a rapid product development board based on TI's TMS320DM6467 DaVinci technology. This small form factor board is ideal for prototyping and mass production of high performance video products such as:

- high definition cameras with performance video analytics
- IP video encoders/servers (up to eight D1 channels with H.264 encoding and embedded analytics)
- digital video records (DVR)
- set top box (STB)
- digital signage players

Key benefits

- Preinstalled operating system, board support package (BSP) and turnkey applications
- Cost reduction thanks to the universal design
- Suitable for both prototyping and production

Purchase options

- Royalty-free reference design license
- OEM-units made and stocked in Europe

Verticals

- Perimeter security
- Public space security
- Critical infrastructure surveillance
- Road and transport surveillance and data collection
- Retail surveillance and data collection

Board support package (BSP)

UBL and U-Boot utilities provide:

- Loading of image of UBL, U-Boot, Linux kernel, root file system via UART or TFTP
- Saving the above images to flash memory
- Lunning Linux kernel from memory or via TFTP

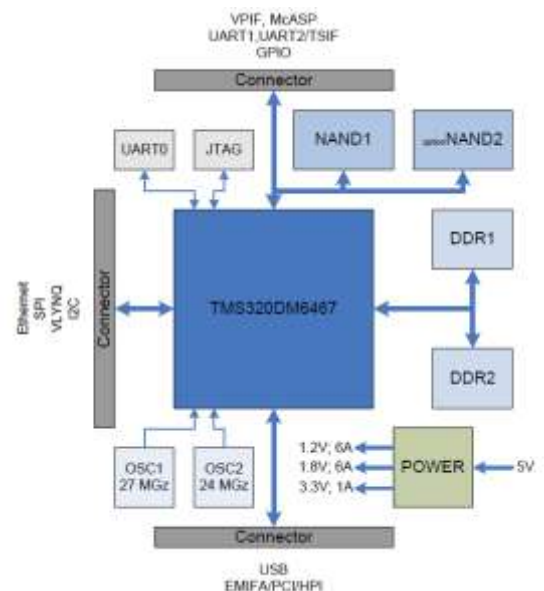
The standard file system includes udev, MTD Utilities, openSSH, openssl, zlib, lzo2, tthttpd, DSP codec server. All the software is supplied in open source except for MontaVista's libc.



Top view



Bottom view



Module diagram



Specification

Processor	TMS320DM6467, 594 – 729 MHz
RAM	DDR2, 64-256 Mb
Flash memory	NAND flash, 128 Mb – 2 Gb
Input voltage	5V +/-10%
Input current	Average 1A, up to 2A
Operating temperature range	-40°C to +85°C
Hardware encoders/decoders	H.264, MPEG2, VC1, MPEG4 SP/ASP
OS	Linux 2.6.1.0
VPIF	BT.656, BT.1120
EMIF	16/8 bit 10/100/1000 Mbps Ethernet, management data
Ethernet	I/O (MDIO) module
USB	USB 2.0 High/Full client USB 2.0 High/Full/Low host
PCI	32 Bit, 33MHz, 3.3V, conforms to PCI specification 2.3
UART	3 ports, supports up to 1.8432 Mbps UART
SPI	Two chip-selects
I2C	Available
VLYNQ	FPGA interface
PWM	Two outputs
General purpose I/O	Up to 33 GPIO pins
Connector	3 connectors, 80 pins, pitch 0.5 mm
Board size	80 x 55 x 14 mm

See the TI's web site for further details about the DaVinci DM6467 SoC:

www.ti.com/corp/docs/landing/davinci/dm6467.html