



TMDSVDP64X-2 Data Sheet

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The TMDSVDP64X-2 is a videophone development platform (VDP), based on TMS320DM643 Processor from Texas Instruments.

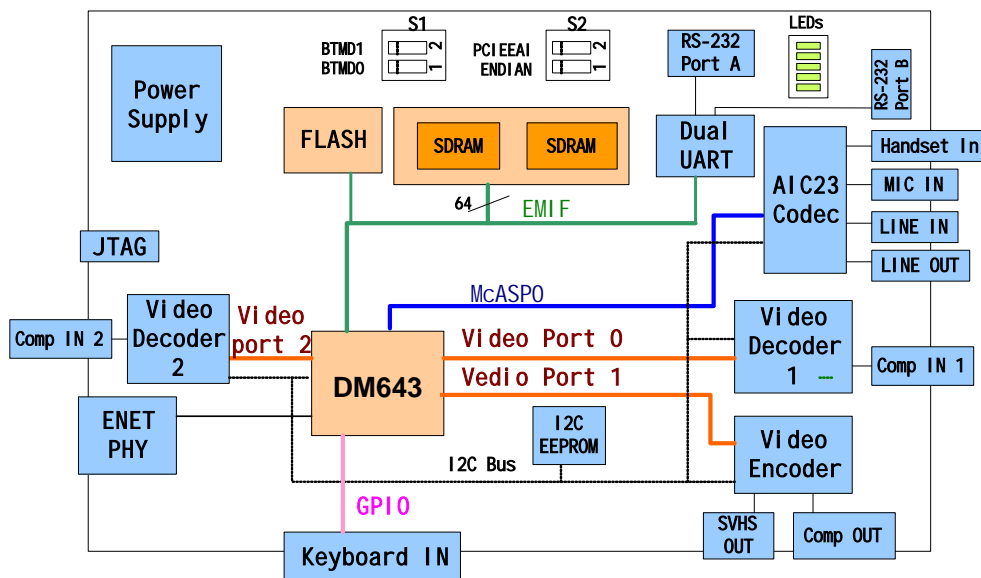
Features include:

Features

- Integration with industry leading voice, video compression technologies
- Open Software architecture and APIs allow ease of feature enhancements
- Ready to use application software with fully integrated hardware and software solution enables quick time to market
- Voice/video processing, signaling, network and system control functions are all performed on a single processor, the DM643™
- Based on H.323 and is compatible with other H.323 voice and video telephony solutions
- Development platform based on DM643™ processor
- Development platform with built-in 5" TFT Color Screen and CCD Camera with audio and video connections to interface or to an external TV, camera and handset
- IP Connectivity with Ethernet
- In the future, it can be intergraded with other Network/Signaling stack

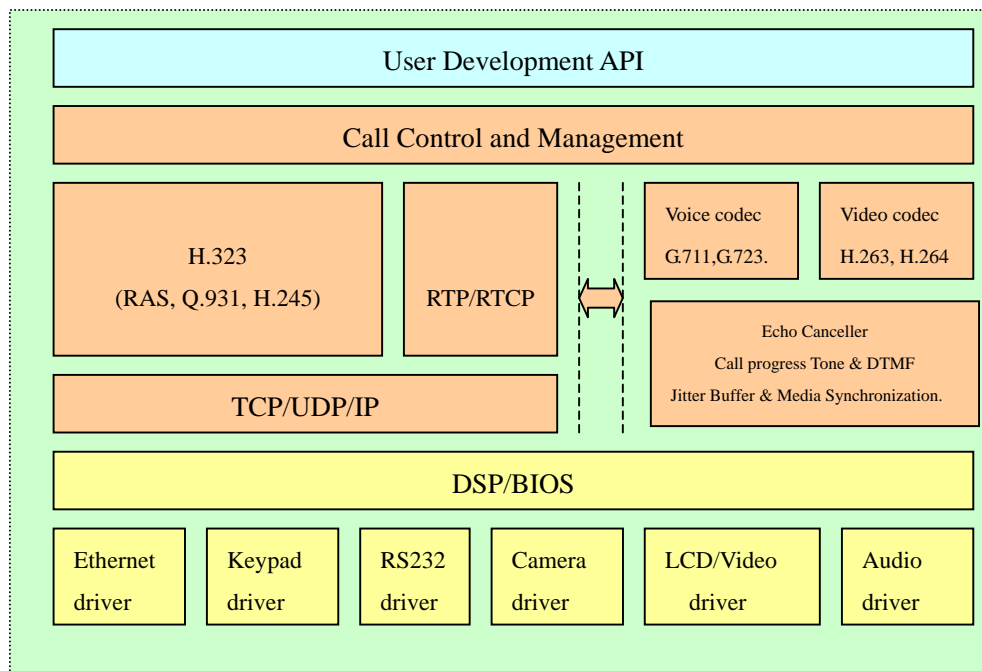
Hardware

- Processor: TI TMS320DM643 DSP operating at 600 MHz
- Memory
 - 4 MB Flash
 - 32 MB SDRAM
- Audio/Video Interfaces
 - MIC-In and Line-Out
 - Two Video_in (CVBS) ports
 - Video_out (CVBS) port
- Communication Interfaces
 - 10/100 Base T Ethernet port
 - Dual UART with RS-232 drivers
- System Interfaces
 - Keypad input
 - 5 LEDs
 - JTAG port
 - 12V (3A) power input
 - Expansion connectors for future use



Software

- Video Codec: H.263 CIF up to 30 fps
H.264 CIF up to 30 fps
- Voice Codec: Narrow Band: G.711u, G.723.1a
Future intergraded with G.711a and G.729
- Acoustic Echo Canceller G.167
- Silence Suppression: Voice activity detection (VAD) / comfort noise generation (CNG)
- Telephony Functions: DTMF tone generator, call progress tones generator
- Jitter buffer and media synchronization: Enhanced video and audio quality with various network conditions to maintain lip synchronization
- Integrated framework: Built on top of DSP/BIOS
TI Reference Framework 5 (RF5)
- Network/signaling features:
 - Media control: RTP / RTCP
 - Network control: TCP/UDP/IP (TI NDK v1.71)
 - Call control: H.323v.4 (RAS, Q.931, H.245)



VDP Package Contents

- ✧ Main board
 - ✧ Camera/Screen panel
 - ✧ Handset
 - ✧ AC Adapter
 - ✧ 10/100M Switch
 - ✧ Technical Reference Menu
 - ✧ CD
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- Device drivers / board support packages for the VDP.
 - Complete application software for the video phone function integrating the DSP/media processing, call control and signaling software, network processing software and user interface.
 - Quick start, hardware, software and interface documents

