



OVERVIEW

The ES9701 VoIP Processor is a comprehensive and fully integrated solution for a wide variety of VoIP phones and VoIP-to-analog phone adapters. The device combines ultra low cost with high level integration, high performance and the lowest power consumption currently available.

Description	Package	Frequency (MHz)	Ethernet	SLIC
VoIP Processor	176-LQFP	125	10/100	2

The ES9701 VoIP Processor provides all the necessary processors and peripherals (Ethernet switch, two SLICs with three Audio ADC/DACs, LCD interface) to enable the rapid development of full featured VoIP business phones and low cost consumer phones or adapters.

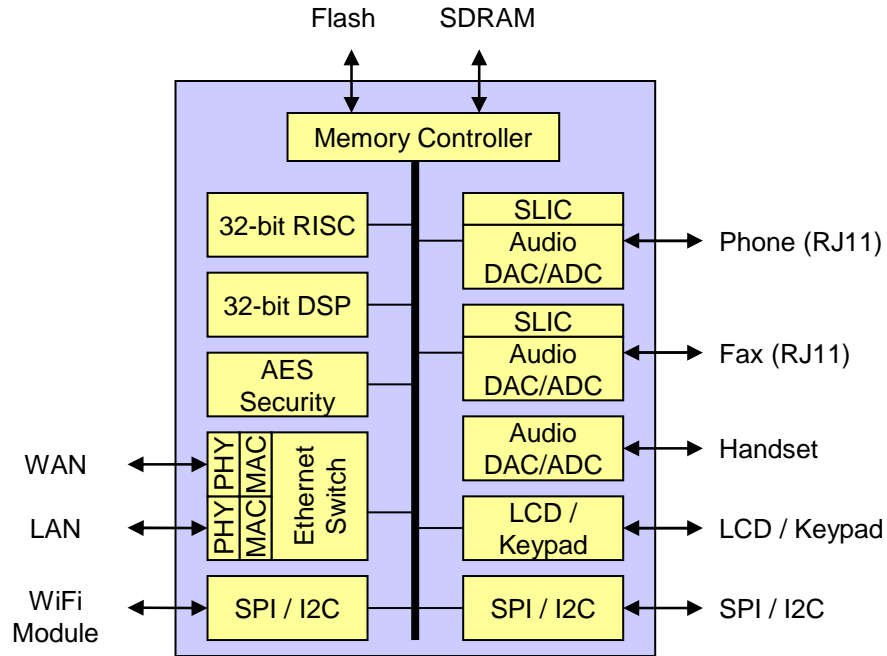
ESS supports its new ES9701 VoIP Processor with a comprehensive phone/adaptor reference designs and VoIP software stack.

The ES9701 can also be used together with the DMPX (ES6460/1) picture frame processor to realize video/photo IP phones.

KEY FEATURES

Feature	Benefit
Hardware <ul style="list-style-type: none"> 125MHz MIPS-X 125MHz Aura DSP Triple Audio DAC Triple Audio ADC 	<ul style="list-style-type: none"> Handles display, control and signaling Handles Voice CODEC and Voice processing Eliminates external audio DAC Eliminates external audio ADC
Interface <ul style="list-style-type: none"> SLIC x2 Ethernet Switch SDIO LCD display I2C, SPI and MPI 	<ul style="list-style-type: none"> Connect existing analog phones and Fax machines Two 10/100 MAC/PHYs for WAN and LAN Connect peripheral memory modules, Wi-Fi, etc. Connect graphic and alpha-numeric displays Connect peripheral devices
Software <ul style="list-style-type: none"> Calling Protocols Supporting Protocols Fax over IP Management Calling Features Tone Gen / Detect Echo Cancellation Caller ID Security Audio CODECs 	<ul style="list-style-type: none"> Support industry standard H.323 and SIP RSVP, RTP, SRTP, RTCP, RTSP, SAP, SDP, MGCP T.38/T.30 SNMP agent and TFTP Dial, transfer, forward, waiting, hold, callback DTMF, MF, CAS, CDIS, Conferencing gen / detection G.165 / G.168 Echo canceling near and far-end Block / Unblock, Call timer and Time of Day IPSec and IKE G.711/ G.729AB/ G.723/ G.722 voice CODECs

IC BLOCK DIAGRAM



SYSTEM BLOCK DIAGRAM

