

Touch pannel

Full name	Status	Vendor	Geometry	Variation	Feature
10/12-bit Touch Pannel	○	TSMC	65/55nm	LP	1. Audio sample rates support 8KHz to 96KHz in DAC path 2. Audio sample rates support 8KHz to 48KHz in ADC path 3. Support audio interface formats: 24-bit I2S interface

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AFE

Full name	Status	Vendor	Geometry	Variation	Feature
3-channel multi-format AFE	●	HLMC	55nm	LP	1. Single-ended Input with Fully differential Internal Processing 2. 0.5 ~ 1 Vp-p Analog Input Range for YPbPr and RGB Inputs
Video AFE	○	TSMC	65/55nm	LP	1. Programmable Gain Amplifier 2. Single-ended input with fully differential processing
3 channel Video AFE	○	SMIC	180nm	MX	1. 1.8V and 3.3V power supplies required. 2. 3-Channel AFE with shared internal reference generator.
Video AFE	○	UMC	180nm	LL	1. Power supplies of 1.8V and 5.0V are required. 2. Operation frequency of 1MHz to 27MHz.

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CODEC

Full name	Status	Vendor	Geometry	Variation	Feature
Audio ADC	●	HLMC	55nm	LP	1. Support sampling rates from 8KHz up to 192KHz 2. Input system frequency up to 12MHz
Audio DAC	●		55nm		1. Support sampling rates from 8KHz up to 192KHz 2. Input system frequency up to 12MHz
	○	SMIC	130/110nm		1. Stereo DAC SNR 95dB, THD+N -80dB at 44.1kHz, 3.3V 2. Stereo ADC SNR 90dB, THD+N -75dB at 44.1kHz, 3.3V
Stereo	○	TSMC	65/55nm		1. Audio sample rates support 8KHz to 96KHz in DAC path 2. Audio sample rates support 8KHz to 48KHz in ADC path 3. Support audio interface formats: 24-bit I2S interface
	○		180nm		The DAC is an 95dB audio stereo DAC designed in 0.18um technology, using the 3.3V option. It converts digital data stream at 48kS/96kS digitally up-sampled at 6.144MHz, into a differential analog voltage..

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