



Home About NXP News Careers Investors Order/buy Support Contact my.NXP

Select site:

Advanced search / Selection guides

Products Audio / video Media processors **PNX1002EL**

Applications Looking for

PNX1005

[Preview](#) [Product information](#) [Selection guide](#)

See also

Datasheet

PNX1005

No datasheet available

[Notify me when datasheet becomes available](#)

PNX1005 - Software programmable video DSP

- [General description](#)
- [Features](#)
- [Products/packages](#)
- [Quality/reliability/chemical content](#)
- [Pricing/ordering/availability](#)
- [Samples](#)
- [Discontinued information](#)
- [Applications](#)
- [Block diagrams/pinning](#)
- [Design support](#)
- [Parameters/similar products](#)
- [Print/email](#)
- [Disclaimers](#)

All information hereunder is subject to the subsequent disclaimers

- [See the answers to FAQ's on certain fields of interest](#)
- [Find NXP's equivalent of a competitor's part number](#)
- [View case studies on general applications or technologies](#)
- [Request contact with a technical expert](#)
- [Find more information on NXP's Vision](#)
- [Find out more about our ordering process](#)
- [Receive e-news on specific interest areas](#)

General description

[Hide](#)

Based on the TriMedia DSP technology, the PNX1005 supports programmable signal processing for high-definition video compression, decompression, analysis and improvement. It supports multiple video compression standards, such as H.264, MPEG-4, MJPEG and many others. The PNX1005 handles full 1080p/60 on input and output for HD 1080p picture processing.

The PNX1004 is a cost optimized version in a smaller package.
The PNX1002 is an audio digital signal processor (DSP) for audio processing in both fixed and floating point, focused on audio acousting processing.

Also available are development boards for PNX1005 :
OM4965 is a PCI development board with HDMI input and output and 4 channel video input.
OM4966 is a complete reference design for 16 channel DVR solution.
OM4967 is a standalone development board with HDMI input and output, 8 channel video input, SATA, Ethernet and other interfaces.

A complete Software Development Kit is available from NXP. To receive the software, please register on www.tcshelp.com

[Back to top](#)

Features

[Hide](#)

- High performance video DSP media processor
- 32-bit 400 MHz TriMedia TM3282 CPU
- Supports all popular digital video and audio compression standards, H.264/MPEG/MJPEG/720p/30fps, dual channel D1/30fps or 8 channel D1/7fps encoding or decoding
- Software programmable with powerful multimedia instructions for entropy coding, motion estimation and fixed and floating point instructions
- On-chip, independent, DMA units perform I/O, coprocessing, scaling, advanced de-interlacing, color space conversion, Bayer pattern conversion, etc.
- Video input supports up to 1080p/60p or 8 channels SD or bitstreams up to 24bit@157MHz
- Video output supports 1080p/60 or dual SD
- 16 channels audio in and out
- Integrated USB 2.0 OTG

[Back to top](#)

Products/packages

[Hide](#)

Type number	Orderable part number	Ordering code (12NC)	Product status	Package	Packing	Marking	ECCN
OM4965/PNX1005E/2	OM4965/PNX1005E/2,	9352 898 62598	Volume production	NAD000			
OM4966/PNX1005E	OM4966/PNX1005E,59	9352 898 98598	Volume production	NAD000			
OM4967/PNX1005E	OM4967/PNX1005E,59	9352 904 29598	Development	NAD000			
PNX1002EL/350	PNX1002EL/350,557	9352 905 13557	Development	SOT1143-1 (LFBGA417)	Tray Dry Pack, Bakeable, Multiple	Standard Marking	
PNX1002EL/400	PNX1002EL/400,557	9352 905 14557	Development	SOT1143-1 (LFBGA417)	Tray Dry Pack, Bakeable, Multiple	Standard Marking	
PNX1004EL/350	PNX1004EL/350,557	9352 905 15557	Development	SOT1143-1 (LFBGA417)	Tray Dry Pack, Bakeable, Multiple	Standard Marking	
PNX1004EL/400	PNX1004EL/400,557	9352 905 16557	Development	SOT1143-1 (LFBGA417)	Tray Dry Pack, Bakeable, Multiple	Standard Marking	
PNX1005E/350	PNX1005E/350,557	9352 890 26557	Volume production	SOT1136-1 (BGA420)	Tray Dry Pack, Bakeable, Multiple	Standard Marking	
PNX1005E/350ST	PNX1005E/350ST,557	9352 898 64557	Development	SOT1136-1 (BGA420)	Tray Dry Pack, Bakeable, Multiple	Standard Marking	
PNX1005E/400	PNX1005E/400,557	9352 890 27557	Volume production	SOT1136-1 (BGA420)	Tray Dry Pack, Bakeable, Multiple	Standard Marking	
PNX1005E/400ST	PNX1005E/400ST,557	9352 898 63557	Development	SOT1136-1 (BGA420)	Tray Dry Pack, Bakeable, Multiple	Standard Marking	

[Back to top](#)

Quality/reliability/chemical content

[Hide](#)

Type number	Orderable part number	Chemical content	RoHS	Leadfree conversion date	RHF	IFR (FIT)	MTBF (hours)	MSL
OM4965/PNX1005E/2	OM4965/PNX1005E/2,	Not available		Always Pb-free				
OM4966/PNX1005E	OM4966/PNX1005E,59	Not available		Always Pb-free				
OM4967/PNX1005E	OM4967/PNX1005E,59	Not available		Always Pb-free				
PNX1002EL/350	PNX1002EL/350,557	PNX1002EL_350		Always Pb-free				
PNX1002EL/400	PNX1002EL/400,557	PNX1002EL_400		Always Pb-free				

Type number	Orderable part number	Chemical content	RoHS	Leadfree conversion date	RHF	IFR (FIT)	MTBF (hours)	MSL
PNX1004EL/350	PNX1004EL/350,557	PNX1004EL_350		Always Pb-free				
PNX1004EL/400	PNX1004EL/400,557	PNX1004EL_400		Always Pb-free				
PNX1005E/350	PNX1005E/350,557	PNX1005E_350		Always Pb-free				
PNX1005E/350ST	PNX1005E/350ST,557	PNX1005E_350ST		Always Pb-free				
PNX1005E/400	PNX1005E/400,557	PNX1005E_400		Always Pb-free				
PNX1005E/400ST	PNX1005E/400ST,557	PNX1005E_400ST		Always Pb-free				

Quality and reliability disclaimer

[Back to top](#)

Pricing/ordering/availability

[Hide](#)

Type number	Ordering code (12NC)	Orderable part number	Indicative price/unit(\$)	Region	Distributor	In stock	Order quantity	Inventory date	Buy online	Samples
OM4965/PNX1005E/2	9352 898 62598	OM4965/PNX1005E/2,								not available
OM4966/PNX1005E	9352 898 98598	OM4966/PNX1005E,59								not available
OM4967/PNX1005E	9352 904 29598	OM4967/PNX1005E,59								not available
PNX1002EL/350	9352 905 13557	PNX1002EL/350,557								not available
PNX1002EL/400	9352 905 14557	PNX1002EL/400,557								not available
PNX1004EL/350	9352 905 15557	PNX1004EL/350,557								not available
PNX1004EL/400	9352 905 16557	PNX1004EL/400,557								not available
PNX1005E/350	9352 890 26557	PNX1005E/350,557								Order samples
PNX1005E/350ST	9352 898 64557	PNX1005E/350ST,557								not available
PNX1005E/400	9352 890 27557	PNX1005E/400,557								Order samples
PNX1005E/400ST	9352 898 63557	PNX1005E/400ST,557								not available

[Back to top](#)

Applications

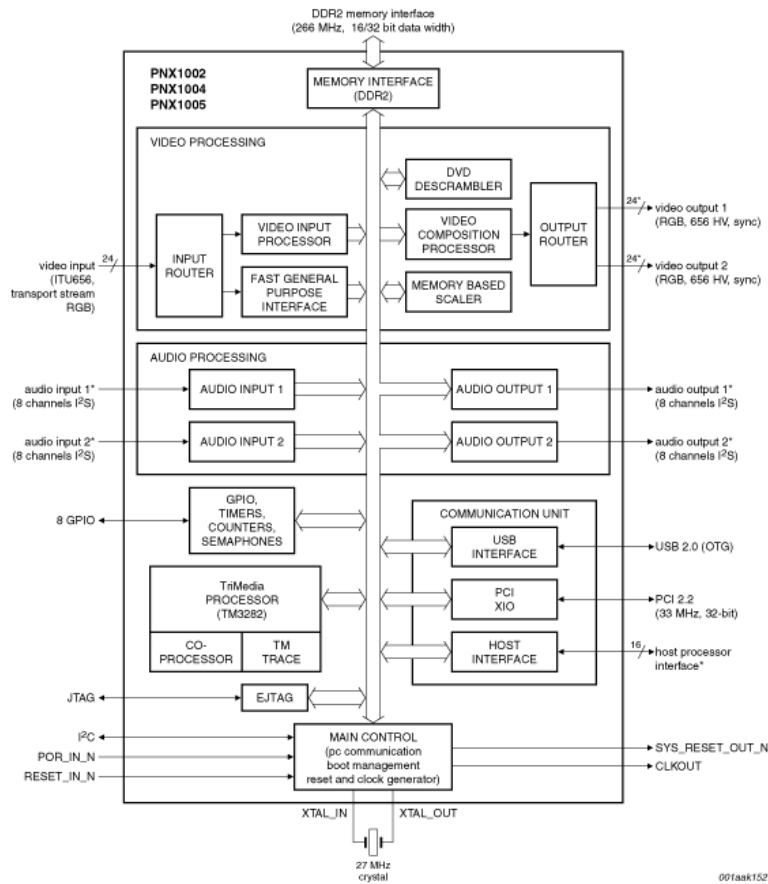
[Hide](#)

- DVR for security and Surveillance (CCTV)
- Audio- and videoconferencing
- Professional video processing
- Broadcast video equipment

[Back to top](#)

Block diagrams/pinning

[Hide](#)



[Back to top](#)

Design support

[Hide](#)

Online Design Tools

[Please register on tcshelp.com for direct support of all TriMedia DSP based products \(27-Oct-09\)](#)

[Back to top](#)

Print/email

[Hide](#)

Email this product information
Print this product information

[Back to top](#)

Disclaimers

[Hide](#)

General product disclaimer
Quality and reliability disclaimer

NXP | [Privacy policy](#) | [Terms of use](#) | [Sitemap](#) | [Switch to classic mode](#)
©2006-2009 NXP Semiconductors. All rights reserved.