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Global / English

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Keyword   Type number   Cross reference

ASC884x/5xA Series

🖨 Print

Advanced IP camera processor series for 720p@30fps up to 1080p@65fps H.264 encoding

| Overview | Parametrics | Products / Packages / Packing | Quality | Documentation | Ordering | Design support | Show all |

Direct downloads

⬇ All documentation (zip)

▶ (All documents1)

Quick ordering

ASC8848AETK   ⑥

Region -- select your region ⑥

Distributor   **In Stock**

OR: [Order samples]

A range of pin-to-pin compatible high definition surveillance camera products that integrate the full functionality from raw image sensor data input, image signal processing (ISP), and high profile H.264 compression to secure transmission over the network.

The 'Advanced' version of these IP Camera products exhibits further improved image enhancement capabilities for low light conditions and frame-rates up to 1080p/60. At the same time, these products remain fully pin-to-pin compatible with the previous IP camera products of NXP, enabling easy design upgrades without the need for hardware modifications.

Excellent low light performance is provided by advanced 3D noise reduction (NR) and edge enhancement. Multiple 3D NR modes allow trade-offs between bit-rate and picture detail, enabling bandwidth / storage needs to be tailored to meet specific application requirements.

Features and benefits

- Low bitrate compression at uncompromised high video quality by High Profile H264 compression
- Low power consumption by dedicated H264 and MJPEG hardware compression engines
- Image signal processing up to 1080p/60
- 135 Mpix/s H264 encoding capability: 1080p/60 and D1/30
- 5120 pixels sensor width enabling 5 Mpix @ 26 frames/s
- H.264, MPEG-4 and H.263, and JPEG encoders for compression flexibility
- 3D noise reduction and sharper edge enhancement
- Wide dynamic range with 12 bit Gamma correction
- IVS - Intelligent Video System supporting Advanced Motion Detection and Boundary Control
- Full range of pin-2-pin compatible product for 720p/30 up to 1080p/60 network cameras
- Also pin-2-pin compatible with ASC884x/5xET, enabling easy upgrades without hardware redesign
- Easy to use, with SDK (Software Development Kit) for advanced features
- Extensive peripheral / interface options

Applications

- Surveillance IP camera
- Car Video Recording
- Digital Video Recorder (8x D1)
- Video conferencing
- Video door phone and intercom
- Industrial vision

▶ **Parametrics** & similar products
▶ **Parametric search** all Security and surveillance IP camera

Parametrics of this product

Type number	Package	H.264 compression performance	Video channels	CPU f_{max} (MHz)	DDR support	Nr of input bits supported [max]	Sensor resolution [max] (Mpixel)	VOC bits [max] (bits)	HDMI output support [max]	BT.1120 output format	External Memory Interface; DDR II/III	External Memory Interface; NAND Flash
ASC8848AET	SOT1343-1 (TFBGA484)	720p/45	3	400.0	1-ch 16b DDR-II/III, 266 MHz up to 1 GB per channel	12	5.0	8		N	1	1
ASC8851AET	SOT1343-1 (TFBGA484)	1080p/45	8	600.0	2-ch 16b DDR-II/III, 400 MHz up to 1 GB per channel	16	12.0	24	1080p/60	Y	2	2
ASC8850AET	SOT1343-1 (TFBGA484)	1080p/35	6	600.0	2-ch 16b DDR-II/III, 400 MHz up to 1 GB per channel	16	12.0	24	1080p/60	Y	2	2
ASC8849AET	SOT1343-1 (TFBGA484)	SXGA/45	4	500.0	2-ch 16b DDR-II/III, 333 MHz up to 1 GB per channel	16	5.0	24	720p/60	Y	2	2
ASC8852AET	SOT1343-1 (TFBGA484)	1080p/65	8	600.0	2-ch 16b DDR-II/III, 400 MHz up to 1 GB per channel	16	12.0	24	1080p/60	Y	2	2

Package

Type number	Orderable part number	Ordering code (12NC)	Product status	Package	Packing	Marking
ASC8848AET	ASC8848AETK	9352 982 29557	Development	SOT1343-1 (TFBGA484)	Tray Dry Pack, Bakeable, Multiple	Standard Marking
ASC8848AET	ASC8848AETE	9352 982 29551	Development	SOT1343-1 (TFBGA484)	Tray Dry Pack, Bakeable, Single	Standard Marking
ASC8849AET	ASC8849AETK	9352 982 31557	Development	SOT1343-1 (TFBGA484)	Tray Dry Pack, Bakeable, Multiple	Standard Marking
ASC8849AET	ASC8849AETE	9352 982 31551	Development	SOT1343-1 (TFBGA484)	Tray Dry Pack, Bakeable, Single	Standard Marking
ASC8850AET	ASC8850AETE	9352 982 32551	Development	SOT1343-1 (TFBGA484)	Tray Dry Pack, Bakeable, Single	Standard Marking
ASC8851AET	ASC8851AETE	9352 982 33551	Development	SOT1343-1 (TFBGA484)	Tray Dry Pack, Bakeable, Single	Standard Marking
ASC8851AET	ASC8851AETK	9352 982 33557	Development	SOT1343-1 (TFBGA484)	Tray Dry Pack, Bakeable, Multiple	Standard Marking
ASC8852AET	ASC8852AETK	9352 982 34557	Development	SOT1343-1 (TFBGA484)	Tray Dry Pack, Bakeable, Multiple	Standard Marking
ASC8852AET	ASC8852AETE	9352 982 34551	Development	SOT1343-1 (TFBGA484)	Tray Dry Pack, Bakeable, Single	Standard Marking

Type number	Orderable part number	Ordering code (12NC)	Product status	Package	Packing	Marking
ASC8848AET/M3	ASC8848AET/M3K	9352 980 37557	Withdrawn **Replacement product**	SOT1343-1 (TFBGA484)	Tray Dry Pack, Bakeable, Multiple	Standard Marking
ASC8849AET/M3	ASC8849AET/M3E	9352 980 38551	Withdrawn **Replacement product**	SOT1343-1 (TFBGA484)	Tray Dry Pack, Bakeable, Single	Standard Marking
ASC8849AET/M3	ASC8849AET/M3K	9352 980 38557	Withdrawn **Replacement product**	SOT1343-1 (TFBGA484)	Tray Dry Pack, Bakeable, Multiple	Standard Marking
ASC8850AET/M3	ASC8850AET/M3E	9352 980 39551	Withdrawn **Replacement product**	SOT1343-1 (TFBGA484)	Tray Dry Pack, Bakeable, Single	Standard Marking
ASC8850AET/M3	ASC8850AET/M3K	9352 980 39557	Withdrawn **Replacement product**	SOT1343-1 (TFBGA484)	Tray Dry Pack, Bakeable, Multiple	Standard Marking
ASC8851AET/M3	ASC8851AET/M3E	9352 980 41551	Withdrawn **Replacement product**	SOT1343-1 (TFBGA484)	Tray Dry Pack, Bakeable, Single	Standard Marking
ASC8851AET/M3	ASC8851AET/M3K	9352 980 41557	Withdrawn **Replacement product**	SOT1343-1 (TFBGA484)	Tray Dry Pack, Bakeable, Multiple	Standard Marking
ASC8852AET/M3	ASC8852AET/M3K	9352 980 42557	Withdrawn **Replacement product**	SOT1343-1 (TFBGA484)	Tray Dry Pack, Bakeable, Multiple	Standard Marking
ASC8852AET/M3	ASC8852AET/M3E	9352 980 42551	Withdrawn **Replacement product**	SOT1343-1 (TFBGA484)	Tray Dry Pack, Bakeable, Single	Standard Marking
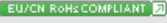
Outline drawing

Package Version	Package Name	Package Description	Reference Codes	Issue Date
⬇ SOT1343-1	TFBGA484	plastic thin fine-pitch ball grid array package; 484 balls		2012-11-26

Discontinuation information

Type number	Ordering code (12NC)	Last-time buy date	Last-time delivery date	Replacement product	DN Notice	Status	Comments
ASC8848AET/M3	935298037557				DN		
ASC8849AET/M3	935298038551				DN		
ASC8849AET/M3	935298038557				DN		
ASC8850AET/M3	935298039551				DN		
ASC8850AET/M3	935298039557				DN		
ASC8852AET/M3	935298042557				DN		
ASC8852AET/M3	935298042551				DN		
ASC8851AET/M3	935298041551				DN		
ASC8851AET/M3	935298041557				DN		

Quality, reliability & chemical content

| Type number	Orderable part number	Chemical content	RoHS	Leadfree conversion date	RHF	IFR (FIT)	MTBF (hours)	MSL	MSL LF
ASC8848AET	ASC8848AETK	ASC8848AET	EU/CN RoHS COMPLIANT 🔲 Pb	Always Pb-free	G			3	3
ASC8848AET	ASC8848AETE	ASC8848AET	EU/CN RoHS COMPLIANT 🔲 Pb	Always Pb-free	G			3	3
ASC8849AET	ASC8849AETK	ASC8849AET	EU/CN RoHS COMPLIANT 🔲 Pb	Always Pb-free	G			3	3
ASC8849AET	ASC8849AETE	ASC8849AET	EU/CN RoHS COMPLIANT 🔲 Pb	Always Pb-free	G			3	3
ASC8850AET	ASC8850AETE	ASC8850AET	EU/CN RoHS COMPLIANT 🔲 Pb	Always Pb-free	G			3	3

Type number	Orderable part number	Chemical content	RoHS	Leadfree conversion date	RHF	IFR (FIT)	MTBF (hours)	MSL	MSL LF
ASC8851AET	ASC8851AETE	ASC8851AET	EU/CN RoHS COMPLIANT Pb	Always Pb-free	G			3	3
ASC8851AET	ASC8851AETK	ASC8851AET	EU/CN RoHS COMPLIANT Pb	Always Pb-free	G			3	3
ASC8852AET	ASC8852AETK	ASC8852AET	EU/CN RoHS COMPLIANT Pb	Always Pb-free	G			3	3
ASC8852AET	ASC8852AETE	ASC8852AET	EU/CN RoHS COMPLIANT Pb	Always Pb-free	G			3	3

The variants in the table below are discontinued. See the table Discontinuation information at the bottom of this page for more information.

Type number	Orderable part number	Chemical content	RoHS	Leadfree conversion date	RHF	IFR (FIT)	MTBF (hours)	MSL	MSL LF
ASC8848AET/M3	ASC8848AET/M3K	Not available	EU/CN RoHS COMPLIANT Pb	Always Pb-free	G			3	3
ASC8849AET/M3	ASC8849AET/M3E	Not available	EU/CN RoHS COMPLIANT Pb	Always Pb-free	G			3	3
ASC8849AET/M3	ASC8849AET/M3K	Not available	EU/CN RoHS COMPLIANT Pb	Always Pb-free	G			3	3
ASC8850AET/M3	ASC8850AET/M3E	Not available	EU/CN RoHS COMPLIANT Pb	Always Pb-free	G			3	3
ASC8850AET/M3	ASC8850AET/M3K	Not available	EU/CN RoHS COMPLIANT Pb	Always Pb-free	G			3	3
ASC8851AET/M3	ASC8851AET/M3E	Not available	EU/CN RoHS COMPLIANT Pb	Always Pb-free	G			3	3
ASC8851AET/M3	ASC8851AET/M3K	Not available	EU/CN RoHS COMPLIANT Pb	Always Pb-free	G			3	3
ASC8852AET/M3	ASC8852AET/M3K	Not available	EU/CN RoHS COMPLIANT Pb	Always Pb-free	G			3	3
ASC8852AET/M3	ASC8852AET/M3E	Not available	EU/CN RoHS COMPLIANT Pb	Always Pb-free	G			3	3

▶ Quality and reliability disclaimer

Discontinuation information

Type number	Ordering code (12NC)	Last-time buy date	Last-time delivery date	Replacement product	DN Notice	Status	Comments
ASC8848AET/M3	935298037557				DN		
ASC8849AET/M3	935298038551				DN		
ASC8849AET/M3	935298038557				DN		
ASC8850AET/M3	935298039551				DN		
ASC8850AET/M3	935298039557				DN		
ASC8852AET/M3	935298042557				DN		
ASC8852AET/M3	935298042551				DN		
ASC8851AET/M3	935298041551				DN		
ASC8851AET/M3	935298041557				DN		

Documentation for this product

⤓ Download all documentation (zip)

File name	Title	Type	Format	Date
⤓ 75017158	NXP IP Camera ASC884x_5x	Leaflet	pdf	2012-07-02
⤓ Advanced_Chips_all	ASC884x/5x chip image	Marcom graphics	png	2012-11-23

Ordering & availability

Type number	Ordering code (12NC)	Orderable part number	Region	Distributor	In stock	Order quantity	Inventory date	Buy online	Samples
ASC8848AET	9352 982 29557	ASC8848AETK							Not available
ASC8848AET	9352 982 29551	ASC8848AETE							Not available
ASC8849AET	9352 982 31557	ASC8849AETK							Not available

Type number	Ordering code (12NC)	Orderable part number	Region	Distributor	In stock	Order quantity	Inventory date	Buy online	Samples
ASC8849AET	9352 982 31551	ASC8849AETE							Not available
ASC8850AET	9352 982 32551	ASC8850AETE							Not available
ASC8852AET	9352 982 34557	ASC8852AETK							Not available
ASC8852AET	9352 982 34551	ASC8852AETE							Not available
ASC8851AET	9352 982 33551	ASC8851AETE							Not available
ASC8851AET	9352 982 33557	ASC8851AETK							Not available

Sample
Sample orders normally take 2-4 days for delivery.
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