

Documentation

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 '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

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

Low bitrate compression at uncompromised high video quality by High Profile

■ H.264, MPEG-4 and H.263, and JPEG encoders for compression flexibility

IVS - Intelligent Video System supporting Advanced Motion Detection and

Easy to use, with SDK (Software Development Kit) for advanced features

■ Full range of pin-2-pin compatible product for 720p/30 up to 1080p/60 network

■ Also pin-2-pin compatible with ASC884x/5xET, enabling easy upgrades without

Low power consumption by dedicated H264 and MJPEG hardware compression

Ordering

Show all

Design support

Quality

Products / Packages / Packing

the network.

need for hardware modifications.

application requirements.

H264 compression

**Boundary Control** 

hardware redesign

Surveillance IP cameraCar Video RecordingDigital Video Recorder (8x D1)

■ Video door phone and intercom

▶ Parametrics & similar products

Parametric search all Security and surveillance IP camera

Video conferencing

Industrial vision

**Applications** 

Features and benefits

■ Image signal processing up to 1080p/60

Extensive peripheral / interface options

135 Mpix/s H264 encoding capability: 1080p/60 and D1/30
5120 pixels sensor width enabling 5 Mpix @ 26 frames/s

3D noise reduction and sharper edge enhancement
 Wide dynamic range with 12 bit Gamma correction

Parametrics of this product

Overview

**Parametrics** 

Direct downloads

All documentation (zip)

▶ (All documents1)

Quick ordering

ASC8848AETK

OR: Order samples

Distributor

Region -- select your region 6

In Stock

6

ASC8848AET	SOT1343-1 (TFBGA484)	720p/45		3	400	0.0	DDR- II/III, 266 MHz up to 1 GB per channel	12	5.	0	8		N	1	
ASC8851AET	SOT1343-1 (TFBGA484)	1080p/45		8	600	0.0	2-ch 16b DDR- II/III, 400 MHz up to 1 GB per channel	16	12	2.0	24	1080p/60	Y	2	
ASC8850AET	SOT1343-1 (TFBGA484)	1080p/35		6	600	0.0	2-ch 16b DDR- II/III, 400 MHz up to 1 GB per channel	16	12	2.0	24	1080p/60	Y	2	
ASC8849AET	SOT1343-1 (TFBGA484)	SXGA/45		4	500	0.0	2-ch 16b DDR- II/III, 333 MHz up to 1 GB per channel	16	5.	0	24	720p/60	Y	2	
<u>ASC8852AET</u>	SOT1343-1 (TFBGA484)	1080p/65		8	600	0.0	2-ch 16b DDR- II/III, 400 MHz up to 1 GB per channel	16	12	2.0	24	1080p/60	Y	2	
Package			'	,				,		,	,	,			
Type number	Orderable par	t	Orderi	ing code			oduct	Package		Packing			Marking		
ASC8848AET	ASC8848AETH	<		982 29557			evelopment	SOT1343- (TFBGA48	_	Tray Dry Multiple	Pack, Bake	eable,	Standard Marking		
ASC8848AET	ASC8848AETE	<b>=</b>	9352 9	982 29551		De	evelopment	SOT1343- (TFBGA48-	1	•	Pack, Bake	eable, Single	Standard Marking		
ASC8849AET	ASC8849AETh	<	9352 9	982 31557		De	evelopment	SOT1343- (TFBGA48-	_	Tray Dry Multiple	Pack, Bake	eable,	Standard Marking		
ASC8849AET	ASC8849AETE		9352 9	982 31551		De	evelopment	SOT1343- (TFBGA48-	- 1	Tray Dry	Pack, Bake	eable, Single	Standard Marking		
ASC8850AET	ASC8850AETE		9352 9	982 32551		De	evelopment	SOT1343- (TFBGA48		Tray Dry	Pack, Bake	eable, Single	Standard Marking		
ASC8851AET	ASC8851AETE		9352 9	982 33551		De	evelopment	SOT1343- (TFBGA48	_	Tray Dry	Pack, Bake	eable, Single	Standard Marking		
ASC8851AET	ASC8851AETh	<	9352 9	982 33557		De	evelopment	SOT1343- (TFBGA48	- 1	Tray Dry Multiple	Pack, Bake	eable,	Standard Marking		
ASC8852AET	ASC8852AETH	<	9352 9	982 34557		De	evelopment	SOT1343-	_	Tray Dry	Pack, Bake	eable,	Standard		

Nr of input

supported

bits

[max]

CPU

 $\mathbf{f}_{\text{max}}$ 

(MHz)

DDR

1-ch 16b DDR-

support

Video

channels

H.264

compression

performance

Package

Type number

ASC8852AET

Downloaded from Arrow.com.

ASC8852AETE

9352 982 34551

Development

(TFBGA484)

SOT1343-1

(TFBGA484)

Multiple

Tray Dry Pack, Bakeable, Single

Marking

Standard

Marking

voc

bits

[max]

(bits)

Sensor

[max]

(Mpixel)

resolution

HDMI

output

[max]

support

Extern

Memor

Interfa

NAND

Flash

1

2

External

Memory

Interface;

DDR II/III

BT.1120

output

format

### The variants in the table below are discontinued. See the table <u>Discontinuation information</u> at the bottom of this page for more information.

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 🗷 🥫	Always Pb-free	G			3	3
ASC8848AET	ASC8848AETE	ASC8848AET	EU/CN ROHSCOMPLIANT 2	Always Pb-free	G			3	3
ASC8849AET	ASC8849AETK	ASC8849AET	EU/CN ROHS COMPLIANT 🗷 🥫	Always Pb-free	G			3	3
ASC8849AET	ASC8849AETE	ASC8849AET	EU/CN ROH2COMPLIANT 🗷 🕫	Always Pb-free	G			3	3
ASC8850AET Inloaded from Arr	ASC8850AETE ow.com.	ASC8850AET	EU/CN ROH2COMPLIANT D	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 ROHSCOMPLIANT 7 PD	Always Pb-free	G			3	3
ASC8851AET	ASC8851AETK	ASC8851AET	EU/CN ROH2COMPLIANT D PO	Always Pb-free	G			3	3
ASC8852AET	ASC8852AETK	ASC8852AET	EU/CN ROH2COMPLIANT 🗵 🔞	Always Pb-free	G			3	3
ASC8852AET	ASC8852AETE	ASC8852AET	EU/CN ROHS COMPLIANT D PD	Always Pb-free	G			3	3

The variants in the table below are discontinued. See the table  $\underline{\text{Discontinuation information}}$  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 ROH2COMPLIANT 🗖 Pò	Always Pb-free	G			3	3
ASC8849AET/M3	ASC8849AET/M3E	Not available	EU/CN ROHSCOMPLIANT 🗷 🔞	Always Pb-free	G			3	3
ASC8849AET/M3	ASC8849AET/M3K	Not available	EU/CN ROH2COMPLIANT 🗖 Pò	Always Pb-free	G			3	3
ASC8850AET/M3	ASC8850AET/M3E	Not available	EU/CN ROHSCOMPLIANT 🗷 🔞	Always Pb-free	G			3	3
ASC8850AET/M3	ASC8850AET/M3K	Not available	EU/CN ROHSCOMPLIANT 🗖 Po	Always Pb-free	G			3	3
ASC8851AET/M3	ASC8851AET/M3E	Not available	EU/CN ROHSCOMPLIANT 🗷 🔞	Always Pb-free	G			3	3
ASC8851AET/M3	ASC8851AET/M3K	Not available	EU/CN ROH2COMPLIANT 🗖 Pò	Always Pb-free	G			3	3
ASC8852AET/M3	ASC8852AET/M3K	Not available	EU/CN ROHSCOMPLIANT 🗷 🔞	Always Pb-free	G			3	3
ASC8852AET/M3	ASC8852AET/M3E	Not available	EU/CN ROHSCOMPLIANT D PO	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 \$
<u></u> 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	ln 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	ln 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.

If you do not have a direct account with NXP our network of global and regional distributors is available and equipped to support you with NXP samples. As a NXP customer you also have the option to order samples via our sales organisation.

#### **Technical support**

Do you want to ask technical questions to an NXP expert?

Please select one of the following options:

- Use our e-mail form to ask a question
- Find answers in our technical support site.

