

Have any questions?

Chat to my Skype (skype:live:sales02\_43)

|

sales02@123anfang.com

f

(http://www.facebook.com/unifore)

t

(http://www.twitter.com/vstarsecurity)

UNIFORE<sup>TM</sup>

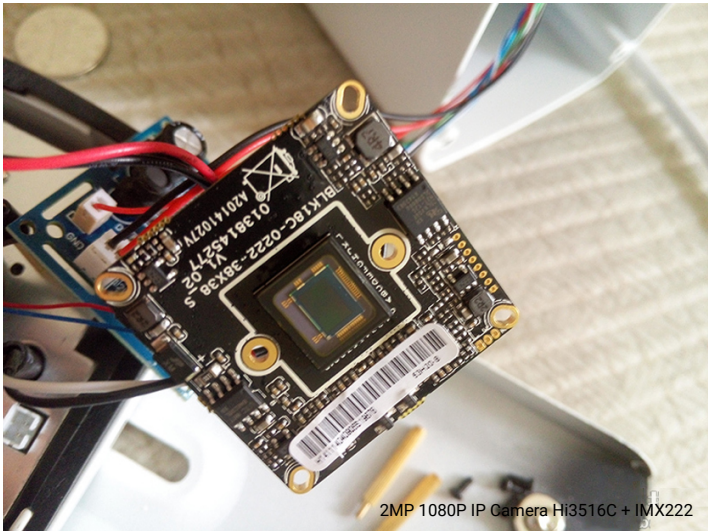
Secure your home&business

(http://www.unifore.net/)

Search ...

Q

🏠 > Blog (/blog/) > IP Video Surveillance (/blog/ip-video-surveillance/) > IP camera SoC - Hi3518E vs Hi3518C



## IP CAMERA SOC - HI3518E VS HI3518C

👤 Unifore Security | 📅 August 25,2015-12:02 PM ⚙️

1 Comment

Several days ago, a new client asked me a question: "which is better between Hi3518E and Hi3518C?". I replied him that Hi3518E was better, since it was the latest SoC from Hisilicon. Thanking for a while, I realize that I also don't know the exact difference between these two SoCs. After I search google on website, I find an article that claims Hi3518C is better than Hi3518E. Then, I spend time to conduct a deep search, and find the correct answer - Hi3518E is slightly better than Hi3518C.

### HI3518E IS THE NEWER THAN HI3518C AND HI3518A

Dated back to 2012, Hisilicon launched Hi3518A and Hi3518C SoC for IP cameras, these two SoC support 1080p@30fps (mailto:1080p@30fps) video encoding and streaming, triple streaming technology, as well as a bunch of imaging technologies including 3D-DNR, Digital WDR, Defog, etc. Among them, Hi3518A had already stopped production, Hi3518C is available and equipped in many 720p/1080p IP cameras in the video surveillance market.

Hi3518E was released by Hisilicon in 2014, it's a new generation SoC (System on a Chip) that comes with improved performance from its predecessors - Hi3518A and Hi3518C. According to Hi3518E datasheet, Hi3518E integrates with latest ISP (Image Signal Processor), enhanced video encoding algorithm, utilizes H.264 video compression. By using the advanced low-power technology and low-power architecture, the Hi3518E is industry-leading in the aspects of low bit rate, high picture quality, and low power consumption. The EBOM costs for the Hi3518E IP camera are significantly reduced by integrating the DRAM, POR, RTC, and audio CODEC and supporting various sensor levels and clock outputs. Similar to other HiSilicon DVR and

## POPULAR TAGS

- Hikvision (/Tag/36-hikvision.html)
- Dahua (/Tag/38-dahua.html)
- Z-Wave (/Tag/32-z-wave.html)
- ZigBee (/Tag/34-zigbee.html)
- HD IP Camera (/Tag/26-hd-ip-camera.html)
- Panasonic (/Tag/31-panasonic.html)
- HDTV I (/Tag/37-hdtvi.html)
- Hisilicon (/Tag/42-hisilicon.html)
- HD-CVI (/Tag/22-hd-cvi.html)
- WDR (/Tag/25-wdr.html)
- ERobot (/Tag/27-erobot.html)



(/ip-video-surveillance/learning-center-basic-knowledge-for-video-surveillance-system.html)



NVR SDKs, the Hi3518E SDK allows rapid mass production and facilitates system layout of IP cameras, DVRs, and NVRs.

HI3518E EMBEDDED WITH P2P CLOUD SERVICE

Since cloud service becomes more and more popular, the latest Hi3518E has already embedded with P2P cloud service (Danale) which greatly improved the "plug-and-play" function. Security camera manufacturers don't need to develop their own cloud service and smartphone applications. The latest Hi3518E comes with free PC software, free smartphone Apps, Software SDK that supports P2P remote viewing, push notification, cloud storage, etc cloud services. If you have Hi3518E based IP cameras, you can use Xmeye App to access your IP cameras via smartphone. Xmeye is available for both iOS and Android platform.

HI3518E HAS BETTER VIDEO PROCESSING CAPABILITY THAN HI3518C

The key specification of Hi3518E on datasheet:

- Hi3518E processor core: ARM9@Max. 440 MHz, 16 KB I-cache, and 16 KB D-cache
- Video encoding protocols: H.264 main profile, H.264 baseline profile, MJPEG/JPEG baseline encoding
- Video encoding performance: 1080p@25fps, 720p@25fps H.264 + 720p@3fps JPEG streams
- Birate range: 16 kbit/s to 20 Mbit/s

Download Hi3518E Datasheet: <http://support.hkvstar.com/file/Hi3518E.pdf>  
(<http://support.hkvstar.com/file/Hi3518E.pdf>)

The key specification of Hi3518C on datasheet:

- Hi3518C Processor Core: ARM926 Max.400MHz, 16 KB I-cache, 16 KB D-cache
- Video encoding protocols: H.264 main profile level 4.0, H.264 baseline profile, MJPEG/JPEG baseline encoding
- Video encoding performance: 1080p@25fps, 720p@25fps H.264 + QVGA@30fps + 720p@1fps JPEG streams
- Birate range: 16 kbit/s to 20 Mbit/s

Download Hi3518C Datasheet: <http://www.hkvstar.com/pdf/Hi3518C.pdf>  
(<http://www.hkvstar.com/pdf/Hi3518C.pdf>)

According to datasheets of Hi3518E and Hi3518C, Hi3518E has slightly better data processing capability than Hi3518C. Hi3518E supports dual video streams, while Hi3518C supports triple video streams. The bitrate range is the same for both cameras. Unfortunately, when I check another website, it provides incorrect data. I have no idea why this article provides the wrong data information although users can easily find these data from datasheets.

3518E Inter core Processor: ARM9@Max.440MHz, 16KB-Cache, 16KB D-Cache

3518C Inter core Processor: ARM926@ 440MHz, 16KB-Cache, 16KB D-Cache

1. Incorrect Data

3518C CBR/VBR Stream rate : 32kbit/s~40Mbit/s 2. Inccorect Data

3518E CBR/VBR/ABR Stream rate : 16kbit/s~20Mbit/s

HI3518E HAS SLIGHTLY HIGHER POWER CONSUMPTION

The typical power consumption of Hi3518E is 900 mW, while the typical power consumption of Hi3518C is 700 mW. The reason is Hi3518E has an internal 16bit 512Mb DDR2, while old Hi3518C doesn't include. Additionally, Hi3518E has much more peripheral Interfaces including 3x UART, 2xSSP (Synchronous Serial Port), 4x PWM (Pulse-Width Modulator). In a nutshell, security camera manufacturers can develop network cameras using Hi3518E with much low cost, and total consumption is much lower than cameras using Hi3518C.

We are pleased to list some IP cameras based on Hi3518C and Hi3518E, as well as Hi3516C SoCs.

Resolution	SoC	CMOS	Remark
1.0MP	Hi3518E / Hi3518C	OV9712 (OmniVision)	



(/category/home-ip-camera.html)



(/home-alarm-system/knight-guard-wireless-security-alarm-system.html)

1.0MP	Hi3518E / Hi3518C	AR0140 (Aptina)	WDR
1.3MP	Hi3518C	MT9P006 (Aptina)	
2MP/1080P	Hi3516C	OV2710	
1.3MP	Hi3518C	AR0130 (Aptina)	Low Illumination
2MP/1080P	Hi3516C	IMX222 (Sony)	Low Illumination

Last, you can find the article which provides incorrect data and conclusion from here: <http://www.mvteamcctv.com/news/What-is-the-difference-between-Hi3518C-and-Hi3518E.html>

Reference: <http://www.hkvstar.com/technology-news/china-ip-camera-configuration-firmware.html> (<http://www.hkvstar.com/technology-news/china-ip-camera-configuration-firmware.html>)

## Get My Latest Posts

Subscribe to get the latest updates.

[Subscribe Now](#)

Your email address will never be shared with any 3rd parties.

1 Comment

Unifore

1


Login

Recommend

Share

Sort by Newest

Join the discussion...



Publicidad Online

• 17 days ago

This company also provides wrong data?

<http://cctvcamerafactory.com/b...>

• Reply


• Share

ALSO ON UNIFORE

WHAT'S THIS?


How to select and install license plate recognition

1 comment • 5 months ago

 Mark — great technology


Smart IP camera + wireless alarm system - integrated

1 comment • 5 months ago

 Andre Khristo EL Khoury — I read the blog carefully so in method 1 its like we have 2


What's HD-MDI security camera? | Analog Surveillance

1 comment • 5 months ago

 Mark — great information . newly to know

Simple guide of IP camera bitrate setting | IP Video

1 comment • 5 months ago

 Antonio Mineiro — Perfect explanation! Thanks.

Prev (/ip-video-surveillance/how-to-install-hd-ip-ir-bullet-camera.html)

Next (/ip-video-surveillance/hd-security-camera-1mp-1-3mp-2mp-3mp-5mp-4k-uhd-resolution.html)

COMPANY

- > Welcome
- > About Us
- > Our Team
- > Contact Us

QUICK LINKS

- > Sitemap ([Http://www.unifore.net/index.php?option=com\\_osmap&view=xml&tmpl=component&images=1&id=1](http://www.unifore.net/index.php?option=com_osmap&view=xml&tmpl=component&images=1&id=1))
- > Imagemap ([Http://www.unifore.net/index.php?option=com\\_osmap&view=xml&tmpl=component&id=1](http://www.unifore.net/index.php?option=com_osmap&view=xml&tmpl=component&id=1))
- > Online Forum ([Http://my.hkvstar.com](http://my.hkvstar.com))
- > Support System ([Http://support.hkvstar.com](http://support.hkvstar.com))

MY ACCOUNT

- > My Account
- > Order History
- > Wish List
- > Affiliates

NEWSLETTER

Sign up for our Newsletter.

Subscribe

Copyright © 2009 - 2015 Unifore Security  
(<http://www.hkvstar.com/>) Innovative Security World. All rights reserved.

in

(http

f

g+

/t/in

(http

(http

(http

(http

secu

/unif

/+H

/vst

/use

info