



Technical Application Note TAN2004003

FlyCapture SDK Color Processing Algorithm Performance
Revised September 19, 2008

1.1. Subject

Technical Application Note (TAN2004003): FlyCapture SDK Color Processing Algorithm Performance

1.2. Applicable Product(s)

- All Point Grey Research Imaging Cameras

1.3. Application Note Description

This Technical Application Note summarizes the performance of each of the five FlyCapture SDK color processing algorithms with a variety of hardware and operating system configurations.

1.4. Overview

All calculations were performed on a single image, independent of Point Grey imaging product. Performance results on similar configurations may vary depending on processor load at the time of testing.

PGR FLYCAPTURE VERSION:	1.8 Alpha 1
OPERATING SYSTEMS:	Windows XP, Windows Vista
PARAMETERS:	
Image Resolution	1280x960
Image Bit Depth	8 bits/pixel
Bit Depth After Processing	24 bits/pixel BGR

1.5. Application Note Data

Processor Type	Processor Speed	Operating System	Architecture	Nearest Neighbor Fast (ms)	Nearest Neighbor (ms)	Edge-Sensing (ms)	High-Quality Linear (ms)	Rigorous (ms)
Intel Xeon	3 GHz	Windows XP Prof. SP2	64-bit	3.4	4.2	10.0	22.4	863
Intel Pentium 4	2.93 GHz	Windows XP Prof. SP3	32-bit	4.3	7.8	16.8	29.1	1036
Intel Core2 Duo E6750	2.66 GHz	Windows XP Prof. SP2	32-bit	3.2	4.6	11.4	22.9	544
Intel Core2 Duo T9300	2.66 GHz	Windows Vista SP1	32-bit	3.2	4.7	12.1	24.3	537
Intel Core2 6600	2.4 GHz	Windows Vista SP1	64-bit	2.7	4.2	11.5	23.7	611
Intel Core2 Quad Q6600	2.4 GHz	Windows XP Prof. SP2	32-bit	3.6	5.3	12.8	25.5	603
Intel Core2 Quad	2.4 GHz	Windows XP Prof. SP2	32-bit	3.7	5.2	15.2	25.3	601
Intel Xeon	2.4 GHz	Windows XP Prof. SP2	32-bit	7.9	11.0	20.1	48.9	1254
AMD Athlon 64 3800+	2.4 GHz	Windows XP Prof. SP3	32-bit	6.4	9.4	24.9	36.3	853
Intel Core2 6300	1.86 GHz	Windows XP Prof. SP2	32-bit	5.4	7.5	17.2	34.0	796
Intel Core2 4300	1.8 GHz	Windows XP Prof. SP2	32-bit	4.8	7.2	17.1	34.1	806
AMD Athlon 64 3000+	1.8 GHz	Windows XP Prof. SP3	32-bit	5.9	9.4	19.5	38.8	907
Intel Atom N270	1.6 GHz	Windows XP Home SP3	32-bit	9.7	14.7	31.8	79.3	1789

1.6. Related Knowledge Base Articles

Article	Title	Address
33	Different color processing algorithms	http://www.ptgrey.com/support/kb/index.asp?a=4&q=33
89	How is color processing performed on my camera's images?	http://www.ptgrey.com/support/kb/index.asp?a=4&q=89
104	Relationship between Dragonfly color processing and number of bits per pixel	http://www.ptgrey.com/support/kb/index.asp?a=4&q=104

1.7. Additional Downloads and Support

Access more Technical Application Notes on the web at www.ptgrey.com/support/downloads.

Point Grey Research Inc. endeavors to provide the highest level of technical support possible to our customers. Most support resources can be accessed through the Product Support section of our website: www.ptgrey.com/support.

Creating a Customer Login Account

The first step in accessing our technical support resources is to obtain a Customer Login Account. This requires a valid name, e-mail address, and camera serial number. To apply for a Customer Login Account go to www.ptgrey.com/support/downloads/.

Knowledge Base

Our on-line knowledge base at www.ptgrey.com/support/kb/ contains answers to some of the most common support questions. It is constantly updated, expanded, and refined to ensure that our customers have access to the latest information.

Product Downloads

Customers with a Customer Login Account can access the latest software and firmware for their cameras from our downloads site at www.ptgrey.com/support/downloads. We encourage our customers to keep their software and firmware up-to-date by downloading and installing the latest versions.

Contacting Technical Support

Before contacting Technical Support, have you:

1. *Read the product documentation and user manual?*
2. *Searched the Knowledge Base?*
3. *Downloaded and installed the latest version of software and/or firmware?*

If you have done all the above and still can't find an answer to your question, contact our Technical Support team at www.ptgrey.com/support/contact/.