



Technical Application Note TAN2004003

*PGR FlyCapture SDK Color Processing Algorithm Performance
Revised April 2, 2004*

1.1. Subject

This Technical Application Note is meant to act as a general guide for customers interested in the performance of the various PGR FlyCapture color processing algorithms. Tests were performed across different hardware platforms with varying processor and memory configurations.

1.2. Application Note Description

PGR FLYCAPTURE VERSION: 1.4 Release 27
OPERATING SYSTEM(S): Windows 2000 and XP
PARAMETERS:
 Image Resolution 1280x960
 Image Bit Depth 8bits/pixel
 Bit Depth After Processing 24bits/pixel BGR

IMPORTANT NOTES:

- All calculations were done on a single image, independent of a PGR IEEE-1394 Imaging Product.
- Performance results on similar machines may vary depending on processor load at the time of testing.

RELEVANT WEB LINKS:

- [Different color processing algorithms.](#)
- [How is color processing performed?](#)
- [Relation between color processing and bits per pixel.](#)

1.3. Application Note Data

Processor Type	Processor Speed	RAM Memory (MB)	Operating System	Nearest Neighbour Faster (ms)	Nearest Neighbour Fast (ms)	Edge-Sensing (ms)	Rigorous (ms)
Intel Pentium 4	2.8GHz	1024	WinXP SP1	5.2	7.5	15.0	573.0
Intel Pentium 4	2.8GHz	1024	WinXP SP1	5.0	7.0	14.3	559.6
Intel Pentium 4	2.8GHz	1024	WinXP SP1	5.0	8.0	15.0	573.9
Intel Pentium 4	2.4GHz	1024	WinXP SP1	5.0	9.0	17.1	657.3
Intel Pentium 4	2.4GHz	1024	WinXP SP1	7.0	10.0	18.0	651.3
Intel Pentium 4	1.8GHz	384	Win2000 SP4	10.0	13.0	23.0	866.6
Intel Pentium 4	1.7GHz	256	Win2000 SP4	8.0	13.0	24.0	910.1
Intel Pentium 4	1.4GHz	512	WinXP SP1	10.0	16.0	29.0	1100.6
Intel Pentium III	850MHz	512	WinXP SP1	23.0	31.0	49.3	1206.2
Intel Pentium III	850MHz	512	WinXP SP1	23.0	31.0	49.0	1199.9
Intel Pentium III	850MHz	512	WinXP SP1	23.0	30.0	49.0	1184.0
Intel Pentium III	850MHz	384	Win2000 SP4	24.0	31.0	49.0	1182.5
Intel Pentium III	800MHz	512	Win2000 SP4	26.1	36.0	58.0	1419.0
Intel Pentium II	500MHz	128	Win2000 SP4	34.0	47.0	79.0	2003.7
Intel Pentium II	450MHz	256	Win2000 SP4	37.0	51.0	86.1	2224.9