

EMVA1288

Application

- idMATE library
- single application exe
- LabVIEW Library

Basic Information

PROPERTY	VALUE
Vendor	
Model	High Dynamic
Type of data presented	Typical
Sensor type	CMOS
Sensor diagonal (or length) /mm	1bd
Lens Category	Chip
Resolution (width x height)	8kx6k
Pixel size (width x height) /µm	10.4 x 10.4
Readout type (CCD only)	n.a.
Transfer type (CCD only)	n.a.
Shutter type (CMOS only)	Global
Overlap capability	non
Max frame rate /fps	25
General conventions	1bd
Typical data valid for number of samples	5
Samples selected by	manually
Interface type	Camera Link

ROI (X0, Y0, X1, Y1):

dark images:

bright images:

Frame no. 1:

Frame no. 2:

Pixel size X [µm]:

Pixel size Y [µm]:

Directory:



Characterize your image sensor or camera according to EMVA 1288

Extended Photon Transfer Method

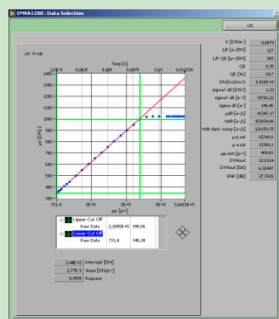
PROPERTY	VALUE
Overall System Gain K [DN/e ⁻]	0.0079
1/K [e ⁻ /DN]	126.6213
1/K QE [p-/DN]	364.9523
Total Quantum Efficiency QE	0.3470
Total Quantum Efficiency QE [%]	34.7053
Dark Current @ Operating Temp µs0 [e ⁻ /s]	41347.1685
sigma ² d0 [DN ²]	1.2304
sigma d0 [e ⁻]	19726.2203
sigma d0 [e ⁻]	140.4051
Dark Current N80 [e ⁻ /s]	153834.8613
Compensated Dark Current N80 dark comp [e ⁻ /s]	126153.7468
Full Well Capacity µ p sat [e ⁻]	20195.2362
Full Well Capacity µ e sat [e ⁻]	70846.1376
µp,µm [e ⁻]	4044.0101
Dynamic Range DYNout	498.7408
Dynamic Range DYNout [db]	9.9621

Features

- Compute EMVA1288 parameter and graphs from measurements
- Input data >>TIF image files from EMVA conform measurements
- easy to use graphical user interface
- Automatic report generation
- EMVA compliant report (save as png files or send to printer)
- ASCII-file with all detail data
- Microsoft Windows compatible software package

Analysis

- computing can be done full automatically, or figure out your raw data range manually
- select the range graphically with cursers and observe the related parameters



Spectrogram Method

PROPERTY	VALUE
ENL1288 [%]	0.5813
DSNU1288 [e ⁻]	2007.6004