

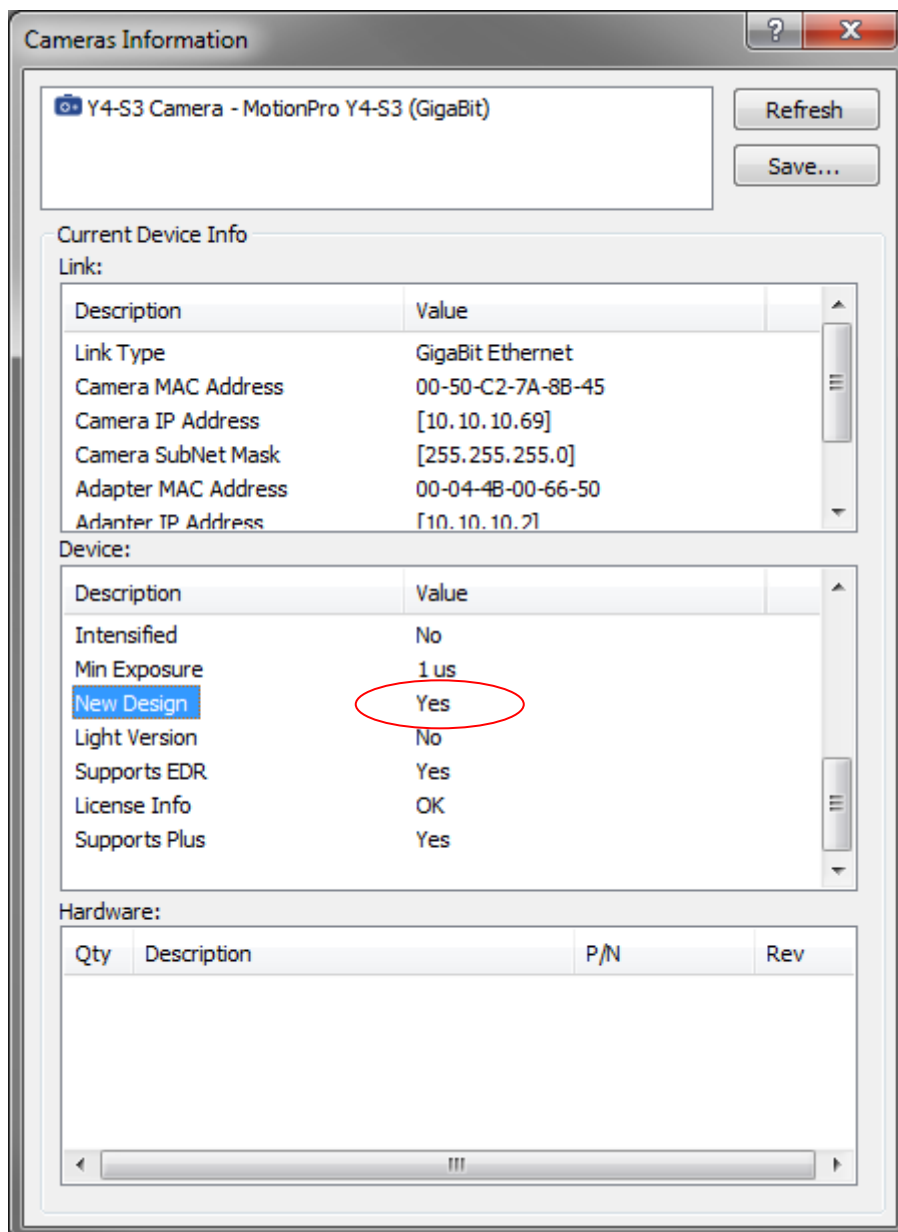


IDT technical Note: 0002 (2012/12/28)

“Differences between pipeline and non-pipeline cameras”

How to detect if a camera is pipeline

Pipeline cameras are also called “new-design” cameras and are Y, N, NR and NX cameras with a version of firmware that includes some on-board capabilities. To detect if a camera is pipeline, select the Help menu on Motion Studio, then select the “Cameras info...” item and then check if the “New design” item is set to Yes (see below).





Main differences between pipeline and non pipeline cameras

The main differences between pipeline and non pipeline cameras are listed in the table below.

Feature	Non pipeline	Pipeline
Background and Pixel sensitivity correction	In the computer	On board
Calibration file	Download to the local hard disk is required	The file is loaded from the camera flash memory to the camera DDR during the boot and used on-board. The download to the hard disk is not required.
Current condition calibration	Supported	Supported
RGB reconstruction from Bayer	In the computer	On board
TNK	Not supported	Supported
Motion Trigger	Slow, it requires LWR to detect motion	1 frame onboard motion detection
Auto-exposure	Not supported	Very fast reaction to intensity change
HDMI image	May be different from the computer image	Computer and HDMI image are the same
Time to boot	Fast	Fast, the calibration file is loaded on the DDR at high speed
Memory size	A few MB larger	A few MB less, they are reserved for the calibration file.