DCAM-API

Property List

For

C11440-10C

Build 3601

July 2011

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INTRODUCTION

This manual describes about properties which camera supports. To refer the detail explanation of each property, please see "Property Reference".

PROPERTY LIST AND VALUES

C11440-10C

C11440-10C Sensor mode		
DCAM_IDPROP_SENSORMODE	R/O	MODE
DCAMPROP_SENSORMODE__AREA		

C11440-10C Trigger		
DCAM_IDPROP_TRIGGERSOURCE	R/W	MODE
DCAMPROP_TRIGGERSOURCE__INTERNAL (DEFAULT)		
DCAMPROP_TRIGGERSOURCE__EXTERNAL		
DCAMPROP_TRIGGERSOURCE__SOFTWARE		
DCAM_IDPROP_TRIGGER_MODE	R/W	MODE
DCAMPROP_TRIGGER_MODE__NORMAL (DEFAULT)		
DCAMPROP_TRIGGER_MODE__START		
DCAM_IDPROP_TRIGGERACTIVE	R/W	MODE
DCAMPROP_TRIGGERACTIVE__EDGE (DEFAULT)		
DCAMPROP_TRIGGERACTIVE__LEVEL		
DCAMPROP_TRIGGERACTIVE__SYNCREADOUT		
DCAM_IDPROP_TRIGGER_GLOBALEXPOSURE	R/W	MODE
DCAMPROP_TRIGGER_GLOBALEXPOSURE__DELAYED (DEFAULT)		
DCAMPROP_TRIGGER_GLOBALEXPOSURE__EMULATE		
DCAM_IDPROP_FIRSTTRIGGER_BEHAVIOR	R/W	MODE
DCAMPROP_FIRSTTRIGGER_BEHAVIOR__STARTEXPOSURE		
DCAMPROP_FIRSTTRIGGER_BEHAVIOR__STARTREADOUT		
DCAM_IDPROP_TRIGGERPOLARITY	R/W	MODE
DCAMPROP_TRIGGERPOLARITY__NEGATIVE (DEFAULT)		
DCAMPROP_TRIGGERPOLARITY__POSITIVE		
DCAM_IDPROP_TRIGGERDELAY	R/W	REAL, Second
0 sec to 10 sec, default 0 sec		
DCAM_IDPROP_TRIGGERTIMES	R/W	LONG
1 to 10000, default 1		

C11440-10C Binning and ROI		
DCAM_IDPROP_BINNING	R/W	MODE
DCAMPROP_BINNING__1 (DEFAULT)		
DCAMPROP_BINNING__2		
DCAM_IDPROP_SUBARRAYHPOS	R/W	LONG
0 to 1918, default 0		
DCAM_IDPROP_SUBARRAYHSIZE	R/W	LONG
2 to 1920, default 1920		
DCAM_IDPROP_SUBARRAYVPOS	R/W	LONG
0 to 1432, default 0		
DCAM_IDPROP_SUBARRAYVSIZE	R/W	LONG
8 to 1440, default 1440		
DCAM_IDPROP_SUBARRAYMODE	R/W	MODE
DCAMPROP_MODE__OFF(DEFAULT)		
DCAMPROP_MODE__ON		

C11440-10C Feature		
DCAM_IDPROP_EXPOSURETIME	R/W	REAL, Second
21 usec to 10 sec, default 0.021991 sec		
DCAM_IDPROP_CONTRASTGAIN	R/W	LONG
0 to 255, default 0		

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C11440-10C ALU		
DCAM_IDPROP_CAPTUREMODE	R/W	MODE
DCAMPROP_CAPTUREMODE__NORMAL (DEFAULT)		
DCAMPROP_CAPTUREMODE__DARKCALIB		
DCAMPROP_CAPTUREMODE__SHADINGCALIB		
DCAM_IDPROP_DEFECTCORRECT_MODE	R/W	MODE
DCAMPROP_MODE__OFF		
DCAMPROP_MODE__ON (DEFAULT)		
DCAM_IDPROP_SUBTRACT	R/W	MODE
DCAMPROP_MODE__OFF (DEFAULT)		
DCAMPROP_MODE__ON		
DCAM_IDPROP_SUBTRACTOFFSET	R/W	LONG
0 to 10000, default 0		
DCAM_IDPROP_DARKCALIB_SAMPLES	R/W	LONG
1 to 256, default 100		
DCAM_IDPROP_SUBTRACTIMAGEMEMORY	R/W	LONG
1, 2, 3 or 4		
DCAM_IDPROP_STORESUBTRACTIMAGETOMEMORY	W/O	LONG
1, 2, 3 or 4		
DCAM_IDPROP_SHADINGCORRECTION	R/W	MODE
DCAMPROP_MODE__OFF (DEFAULT)		
DCAMPROP_MODE__ON		
DCAM_IDPROP_SHADINGCALIB_SAMPLES	R/W	LONG
1 to 256, default 100		
DCAM_IDPROP_SHADINGCALIBDATAMEMORY	R/W	LONG
1, 2, 3 or 4		
DCAM_IDPROP_STORESHADINGCALIBDATATOMEMORY	W/O	LONG
1, 2, 3 or 4		

C11440-10C Output Trigger		
DCAM_IDPROP_OUTPUTTRIGGER_POLARITY	R/W	MODE
DCAMPROP_OUTPUTTRIGGER_POLARITY__NEGATIVE (DEFAULT)		
DCAMPROP_OUTPUTTRIGGER_POLARITY__POSITIVE		
DCAM_IDPROP_OUTPUTTRIGGER_ACTIVE	R/O	MODE
DCAMPROP_OUTPUTTRIGGER_ACTIVE__EDGE		
DCAM_IDPROP_OUTPUTTRIGGER_DELAY	R/W	REAL, Second
0 sec to 10 sec, default 0 sec		
DCAM_IDPROP_OUTPUTTRIGGER_PERIOD	R/W	REAL, Second
10 usec to 10 sec, default 22 usec		
DCAM_IDPROP_OUTPUTTRIGGER_KIND	R/W	MODE
DCAMPROP_OUTPUTTRIGGER_KIND__LOW (DEFAULT)		
DCAMPROP_OUTPUTTRIGGER_KIND__EXPOSURE		
DCAMPROP_OUTPUTTRIGGER_KIND__PROGRAMABLE		
DCAMPROP_OUTPUTTRIGGER_KIND__TRIGGERREADY		

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C11440-10C Synchronous timing

DCAM_IDPROP_TIMING_READOUTTIME		R/O	REAL, Second
	return seconds how long takes to reading out a frame.		
DCAM_IDPROP_TIMING_CYCLICTRIGGERPERIOD		R/O	REAL, Second
	return seconds which period cyclic trigger happens in.		
DCAM_IDPROP_TIMING_MINTRIGGERBLANKING		R/O	REAL, Second
	return seconds required minimum trigger blanking.		
DCAM_IDPROP_TIMING_MINTRIGGERINTERVAL		R/O	REAL, Second
	return seconds required minimum trigger interval.		
DCAM_IDPROP_TIMING_EXPOSURE		R/O	MODE
	DCAMPROP_TIMING_EXPOSURE__ROLLING		
DCAM_IDPROP_INTERNALFRAMERATE		R/O	REAL, Second
	0.1 to 45.454591		
DCAM_IDPROP_INTERNAL_FRAMEINTERVAL		R/O	REAL, Second
	0.022 to 10.0		
DCAM_IDPROP_TIMING_GLOBALEXPOSUREDELAY		R/O	REAL, Second
	0.0 to 0.022		See also EFFECTIVE flag
DCAM_IDPROP_TIMING_INVALIDEXPOSUREPERIOD		R/O	REAL, Second
	0.0 to 0.021979		

C11440-10C System information

DCAM_IDPROP_COLORTYPE		R/O	MODE
	DCAMPROP_COLORTYPE__BW		
DCAM_IDPROP_BITSPERCHANNEL		R/W	LONG
	DCAMPROP_BITSPERCHANNEL__12		DCAM_DATATYPE_UINT16
	DCAMPROP_BITSPERCHANNEL__14		DCAM_DATATYPE_UINT16
DCAM_IDPROP_IMAGE_WIDTH		R/O	LONG
	return width pixel of current setting		
DCAM_IDPROP_IMAGE_HEIGHT		R/O	LONG
	return height line of current setting		
DCAM_IDPROP_IMAGE_ROWBYTES		R/O	LONG
	return horizontal rowbytes of current setting		
DCAM_IDPROP_IMAGE_FRAMEBYTES		R/O	LONG
	return bytes per frame of current setting		
DCAM_IDPROP_IMAGE_TOPOFFSETBYTES		R/O	LONG
	return 0		

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