DCAM-API

Property List

For

C11440-22CU

(Version 2.50)

August 2013

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READ BEFORE USE

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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

C11440-22CU

Sensor mode		
DCAM_IDPROP_SENSORMODE	R/W	MODE
DCAMPROP_SENSORMODE__AREA		(DEFAULT)
DCAMPROP_SENSORMODE__PROGRESSIVE		(V2.50)
DCAM_IDPROP_READOUTSPEED	R/W	LONG (V2.50)
1 to 2		default 2
DCAM_IDPROP_READOUTDIRECTION	R/W	MODE (V2.50)
DCAMPROP_READOUT_DIRECTION__FORWARD		(DEFAULT)
DCAMPROP_READOUT_DIRECTION__BACKWARD		

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__GLOBALRESET		(V2.50)
DCAM_IDPROP_TRIGGERPOLARITY	R/W	MODE
DCAMPROP_TRIGGERPOLARITY__NEGATIVE		(DEFAULT)
DCAMPROP_TRIGGERPOLARITY__POSITIVE		
DCAM_IDPROP_TRIGGER_CONNECTOR	R/W	MODE
DCAMPROP_TRIGGER_CONNECTOR__INTERFACE		
DCAMPROP_TRIGGER_CONNECTOR__BNC		(DEFAULT)
DCAM_IDPROP_TRIGGERTIMES	R/W	LONG
1 to 10000		default 1
DCAM_IDPROP_TRIGGERDELAY	R/W	REAL, Second
0 sec to 10 sec		default 0 sec

Binning and ROI		
DCAM_IDPROP_BINNING	R/W	MODE
DCAMPROP_BINNING__1		(DEFAULT)
DCAMPROP_BINNING__2		
DCAMPROP_BINNING__4		
DCAM_IDPROP_SUBARRAYHPOS	R/W	LONG
0 to 2044		default 0
DCAM_IDPROP_SUBARRAYHSIZE	R/W	LONG
4 to 2048		default 2048
DCAM_IDPROP_SUBARRAYVPOS	R/W	LONG
0 to 2044		default 0
DCAM_IDPROP_SUBARRAYVSIZE	R/W	LONG
4 to 2048		default 2048
DCAM_IDPROP_SUBARRAYMODE	R/W	MODE
DCAMPROP_MODE__OFF		(DEFAULT)
DCAMPROP_MODE__ON		

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Feature

DCAM_IDPROP_SENSORCOOLERSTATUS	R/O	MODE
DCAMPROP_SENSORCOOLER__OFF		(DEFAULT)
DCAMPROP_SENSORCOOLER__READY		
DCAMPROP_SENSORCOOLER__BUSY		
DCAM_IDPROP_EXPOSURETIME	R/W	REAL, Second
0.001004 sec to 10 sec		default 0.009998 sec

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DCAM_IDPROP_DEFECTCORRECT_MODE	R/W	MODE
DCAMPROP_MODE__OFF		
DCAMPROP_MODE__ON		(DEFAULT)

Output Trigger

DCAM_IDPROP_NUMBEROF_OUTPUTTRIGGERCONNECTOR	R/O	LONG
3		
DCAM_IDPROP_OUTPUTTRIGGER_SOURCE	R/W	MODE (V2.50)
DCAMPROP_OUTPUTTRIGGER_SOURCE__READOUTEND		(DEFAULT)
DCAMPROP_OUTPUTTRIGGER_SOURCE__VSYNC		
DCAMPROP_OUTPUTTRIGGER_SOURCE__HSYNC		Only SENSORMODE is PROGRESSIVE
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 0.001 sec
DCAM_IDPROP_OUTPUTTRIGGER_KIND	R/W	MODE
DCAMPROP_OUTPUTTRIGGER_KIND__LOW		(DEFAULT)
DCAMPROP_OUTPUTTRIGGER_KIND__EXPOSURE		
DCAMPROP_OUTPUTTRIGGER_KIND__PROGRAMABLE		
DCAMPROP_OUTPUTTRIGGER_KIND__TRIGGERREADY		
DCAMPROP_OUTPUTTRIGGER_KIND__HIGH		
DCAM_IDPROP_OUTPUTTRIGGER_PREHSYNCCOUNT	R/W	LONG (V2.50)
0 to 2047		default 0

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_GLOBALEXPOSUREDELAY	R/O	REAL, Second
0 to 0.109998		
DCAM_IDPROP_TIMING_EXPOSURE	R/O	MODE
DCAMPROP_TIMING_EXPOSURE__ROLLING		
DCAM_IDPROP_TIMING_INVALIDEXPOSUREPERIOD	R/O	REAL
0.001004 to 0.1		
DCAM_IDPROP_INTERNALFRAMERATE	R/O	REAL, Second
0.1 to 100.022862		
DCAM_IDPROP_INTERNAL_FRAMEINTERVAL	R/O	REAL, Second
0.009998 to 10.0		
DCAM_IDPROP_INTERNALLINESPEED	R/O	REAL, meter / second
0.0065 to 0.667		(V2.50)
DCAM_IDPROP_INTERNAL_LINEINTERVAL	R/O	REAL, Second
0.0000097 to 0.001		(V2.50)

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System information		
DCAM_IDPROP_COLORTYPE	R/O	MODE
DCAMPROP_COLORTYPE__BW		
DCAM_IDPROP_BITSPERCHANNEL	R/W	LONG
DCAMPROP_BITSPERCHANNEL__16		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		
DCAM_IDPROP_IMAGE_PIXELTYPE	R/O	MODE
DCAMPROP_MODE__ON		
DCAM_IDPROP_BUFFER_ROWBYTES	R/O	LONG
return horizontal rowbytes for attached buffer.		
DCAM_IDPROP_BUFFER_FRAMEBYTES	R/O	LONG
return bytes per frame for attached buffer.		
DCAM_IDPROP_BUFFER_TOPOFSETBYTES	R/O	LONG
return top offset bytes for attached buffer.		
DCAM_IDPROP_BUFFER_PIXELTYPE	R/O	MODE
DCAMPROP_MODE__ON		
DCAM_IDPROP_SYSTEM_ALIVE	R/O	MODE
DCAMPROP_SYSTEM_ALIVE__OFFLINE		
DCAMPROP_SYSTEM_ALIVE__ONLINE		(DEFAULT)
DCAM_IDPROP_CONVERSIONFACTOR_COEFF	R/O	REAL
return current conversion factor coefficient		
DCAM_IDPROP_CONVERSIONFACTOR_OFFSET	R/O	REAL
return current conversion factor offset		

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