

FlyCapture2 C

2.4.3.10

Generated by Doxygen 1.7.5

Sat Feb 9 2013 05:06:35



# Contents

<b>1</b>	<b>Data Structure Index</b>	<b>1</b>
1.1	Data Structures . . . . .	1
<b>2</b>	<b>File Index</b>	<b>3</b>
2.1	File List . . . . .	3
<b>3</b>	<b>Data Structure Documentation</b>	<b>5</b>
3.1	fc2AVIOption Struct Reference . . . . .	5
3.1.1	Field Documentation . . . . .	5
3.1.1.1	frameRate . . . . .	5
3.1.1.2	reserved . . . . .	5
3.2	fc2CameraInfo Struct Reference . . . . .	6
3.2.1	Field Documentation . . . . .	7
3.2.1.1	applicationIPAddress . . . . .	7
3.2.1.2	applicationPort . . . . .	7
3.2.1.3	bayerTileFormat . . . . .	7
3.2.1.4	busNumber . . . . .	7
3.2.1.5	ccpStatus . . . . .	7
3.2.1.6	configROM . . . . .	7
3.2.1.7	defaultGateway . . . . .	7
3.2.1.8	driverName . . . . .	7
3.2.1.9	driverType . . . . .	7
3.2.1.10	firmwareBuildTime . . . . .	7
3.2.1.11	firmwareVersion . . . . .	7
3.2.1.12	gigEMajorVersion . . . . .	7
3.2.1.13	gigEMinorVersion . . . . .	8

3.2.1.14	iidcVer	8
3.2.1.15	interfaceType	8
3.2.1.16	ipAddress	8
3.2.1.17	isColorCamera	8
3.2.1.18	macAddress	8
3.2.1.19	maximumBusSpeed	8
3.2.1.20	modelName	8
3.2.1.21	nodeNumber	8
3.2.1.22	pcieBusSpeed	8
3.2.1.23	reserved	8
3.2.1.24	sensorInfo	8
3.2.1.25	sensorResolution	8
3.2.1.26	serialNumber	8
3.2.1.27	subnetMask	8
3.2.1.28	userDefinedName	8
3.2.1.29	vendorName	8
3.2.1.30	xmlURL1	8
3.2.1.31	xmlURL2	8
3.3	fc2Config Struct Reference	8
3.3.1	Field Documentation	9
3.3.1.1	asyncBusSpeed	9
3.3.1.2	bandwidthAllocation	9
3.3.1.3	grabMode	9
3.3.1.4	grabTimeout	9
3.3.1.5	isochBusSpeed	9
3.3.1.6	minNumImageNotifications	9
3.3.1.7	numBuffers	9
3.3.1.8	numImageNotifications	9
3.3.1.9	registerTimeout	9
3.3.1.10	registerTimeoutRetries	9
3.3.1.11	reserved	9
3.4	fc2ConfigROM Struct Reference	9
3.4.1	Field Documentation	10
3.4.1.1	chipIdHi	10

3.4.1.2	chipIdLo	10
3.4.1.3	nodeVendorId	10
3.4.1.4	pszKeyword	10
3.4.1.5	reserved	10
3.4.1.6	unitSpecId	10
3.4.1.7	unitSubSWVer	10
3.4.1.8	unitSWVer	10
3.4.1.9	vendorUniqueInfo_0	10
3.4.1.10	vendorUniqueInfo_1	10
3.4.1.11	vendorUniqueInfo_2	10
3.4.1.12	vendorUniqueInfo_3	10
3.5	fc2EmbeddedImageInfo Struct Reference	11
3.5.1	Field Documentation	11
3.5.1.1	brightness	11
3.5.1.2	exposure	12
3.5.1.3	frameCounter	12
3.5.1.4	gain	12
3.5.1.5	GPIOPinState	12
3.5.1.6	ROIPosition	12
3.5.1.7	shutter	12
3.5.1.8	strobePattern	12
3.5.1.9	timestamp	12
3.5.1.10	whiteBalance	12
3.6	fc2EmbeddedImageInfoProperty Struct Reference	12
3.6.1	Field Documentation	12
3.6.1.1	available	12
3.6.1.2	onOff	12
3.7	fc2Format7ImageSettings Struct Reference	12
3.7.1	Field Documentation	13
3.7.1.1	height	13
3.7.1.2	mode	13
3.7.1.3	offsetX	13
3.7.1.4	offsetY	13
3.7.1.5	pixelFormat	13

3.7.1.6	reserved	13
3.7.1.7	width	13
3.8	fc2Format7Info Struct Reference	13
3.8.1	Field Documentation	14
3.8.1.1	imageHStepSize	14
3.8.1.2	imageVStepSize	14
3.8.1.3	maxHeight	14
3.8.1.4	maxPacketSize	14
3.8.1.5	maxWidth	14
3.8.1.6	minPacketSize	14
3.8.1.7	mode	14
3.8.1.8	offsetHStepSize	14
3.8.1.9	offsetVStepSize	14
3.8.1.10	packetSize	14
3.8.1.11	percentage	14
3.8.1.12	pixelFormatBitField	14
3.8.1.13	reserved	14
3.8.1.14	vendorPixelFormatBitField	14
3.9	fc2Format7PacketInfo Struct Reference	14
3.9.1	Field Documentation	14
3.9.1.1	maxBytesPerPacket	15
3.9.1.2	recommendedBytesPerPacket	15
3.9.1.3	reserved	15
3.9.1.4	unitBytesPerPacket	15
3.10	fc2GigEConfig Struct Reference	15
3.10.1	Field Documentation	15
3.10.1.1	enablePacketResend	15
3.10.1.2	maxPacketsToResend	15
3.10.1.3	reserved	15
3.10.1.4	timeoutForPacketResend	15
3.11	fc2GigEImageSettings Struct Reference	16
3.11.1	Field Documentation	16
3.11.1.1	height	16
3.11.1.2	offsetX	16

3.11.1.3	offsetY	16
3.11.1.4	pixelFormat	16
3.11.1.5	reserved	16
3.11.1.6	width	16
3.12	fc2GigElImageSettingsInfo Struct Reference	16
3.12.1	Field Documentation	17
3.12.1.1	imageHStepSize	17
3.12.1.2	imageVStepSize	17
3.12.1.3	maxHeight	17
3.12.1.4	maxWidth	17
3.12.1.5	offsetHStepSize	17
3.12.1.6	offsetVStepSize	17
3.12.1.7	pixelFormatBitField	17
3.12.1.8	reserved	17
3.12.1.9	vendorPixelFormatBitField	17
3.13	fc2GigEProperty Struct Reference	17
3.13.1	Field Documentation	17
3.13.1.1	isReadable	17
3.13.1.2	isWritable	17
3.13.1.3	max	17
3.13.1.4	min	17
3.13.1.5	propType	18
3.13.1.6	reserved	18
3.13.1.7	value	18
3.14	fc2GigEStreamChannel Struct Reference	18
3.14.1	Field Documentation	18
3.14.1.1	destinationIpAddress	18
3.14.1.2	doNotFragment	19
3.14.1.3	hostPort	19
3.14.1.4	interPacketDelay	19
3.14.1.5	networkInterfaceIndex	19
3.14.1.6	packetSize	19
3.14.1.7	reserved	19
3.14.1.8	sourcePort	19

3.15	fc2H264Option Struct Reference	19
3.15.1	Field Documentation	19
3.15.1.1	bitrate	19
3.15.1.2	frameRate	19
3.15.1.3	height	19
3.15.1.4	reserved	19
3.15.1.5	width	19
3.16	fc2Image Struct Reference	20
3.16.1	Field Documentation	20
3.16.1.1	bayerFormat	20
3.16.1.2	cols	20
3.16.1.3	dataSize	20
3.16.1.4	format	20
3.16.1.5	imageImpl	20
3.16.1.6	pData	20
3.16.1.7	receivedDataSize	20
3.16.1.8	rows	20
3.16.1.9	stride	20
3.17	fc2ImageMetadata Struct Reference	20
3.17.1	Field Documentation	21
3.17.1.1	embeddedBrightness	21
3.17.1.2	embeddedExposure	21
3.17.1.3	embeddedFrameCounter	21
3.17.1.4	embeddedGain	21
3.17.1.5	embeddedGPIOPinState	21
3.17.1.6	embeddedROIPosition	21
3.17.1.7	embeddedShutter	21
3.17.1.8	embeddedStrobePattern	21
3.17.1.9	embeddedTimeStamp	21
3.17.1.10	embeddedWhiteBalance	21
3.17.1.11	reserved	21
3.18	fc2ImageContext Struct Reference	21
3.18.1	Field Documentation	22
3.18.1.1	pBusMgr	22



3.18.1.2	pCamera	22
3.19	fc2InternalGuiContext Struct Reference	22
3.19.1	Field Documentation	22
3.19.1.1	pCameraControlDlg	22
3.19.1.2	pCameraSelectionDlg	22
3.20	fc2InternallImageCallback Struct Reference	23
3.20.1	Field Documentation	23
3.20.1.1	pCallback	23
3.20.1.2	pCallbackData	23
3.21	fc2IPAddress Struct Reference	23
3.21.1	Field Documentation	23
3.21.1.1	octets	24
3.22	fc2JPEGOption Struct Reference	24
3.22.1	Field Documentation	24
3.22.1.1	progressive	24
3.22.1.2	quality	24
3.22.1.3	reserved	24
3.23	fc2JPG2Option Struct Reference	24
3.23.1	Field Documentation	24
3.23.1.1	quality	24
3.23.1.2	reserved	24
3.24	fc2LUTData Struct Reference	25
3.24.1	Field Documentation	25
3.24.1.1	enabled	25
3.24.1.2	inputBitDepth	25
3.24.1.3	numBanks	25
3.24.1.4	numChannels	25
3.24.1.5	numEntries	25
3.24.1.6	outputBitDepth	25
3.24.1.7	reserved	25
3.24.1.8	supported	25
3.25	fc2MACAddress Struct Reference	25
3.25.1	Field Documentation	25
3.25.1.1	octets	26

3.26	fc2MJPGOption Struct Reference	26
3.26.1	Field Documentation	26
3.26.1.1	frameRate	26
3.26.1.2	quality	26
3.26.1.3	reserved	26
3.27	fc2PGMOption Struct Reference	26
3.27.1	Field Documentation	26
3.27.1.1	binaryFile	26
3.27.1.2	reserved	26
3.28	fc2PGRGuid Struct Reference	27
3.28.1	Detailed Description	27
3.28.2	Field Documentation	27
3.28.2.1	value	27
3.29	fc2PNGOption Struct Reference	27
3.29.1	Field Documentation	27
3.29.1.1	compressionLevel	27
3.29.1.2	interlaced	27
3.29.1.3	reserved	27
3.30	fc2PPMOption Struct Reference	28
3.30.1	Field Documentation	28
3.30.1.1	binaryFile	28
3.30.1.2	reserved	28
3.31	fc2StrobeControl Struct Reference	28
3.31.1	Field Documentation	28
3.31.1.1	delay	28
3.31.1.2	duration	28
3.31.1.3	onOff	28
3.31.1.4	polarity	28
3.31.1.5	reserved	28
3.31.1.6	source	28
3.32	fc2StrobeInfo Struct Reference	29
3.32.1	Field Documentation	29
3.32.1.1	maxValue	29
3.32.1.2	minValue	29

3.32.1.3	onOffSupported	29
3.32.1.4	polaritySupported	29
3.32.1.5	present	29
3.32.1.6	readOutSupported	29
3.32.1.7	reserved	29
3.32.1.8	source	29
3.33	fc2SystemInfo Struct Reference	29
3.33.1	Field Documentation	30
3.33.1.1	byteOrder	30
3.33.1.2	cpuDescription	30
3.33.1.3	driverList	30
3.33.1.4	gpuDescription	30
3.33.1.5	libraryList	30
3.33.1.6	numCpuCores	30
3.33.1.7	osDescription	30
3.33.1.8	osType	30
3.33.1.9	reserved	30
3.33.1.10	screenHeight	30
3.33.1.11	screenWidth	30
3.33.1.12	sysMemSize	30
3.34	fc2TIFFOption Struct Reference	30
3.34.1	Field Documentation	31
3.34.1.1	compression	31
3.34.1.2	reserved	31
3.35	fc2TimeStamp Struct Reference	31
3.35.1	Field Documentation	31
3.35.1.1	cycleCount	31
3.35.1.2	cycleOffset	31
3.35.1.3	cycleSeconds	31
3.35.1.4	microSeconds	31
3.35.1.5	reserved	31
3.35.1.6	seconds	31
3.36	fc2TriggerDelay Struct Reference	31
3.36.1	Field Documentation	32

3.36.1.1	absControl	32
3.36.1.2	absValue	32
3.36.1.3	autoManualMode	32
3.36.1.4	onePush	32
3.36.1.5	onOff	32
3.36.1.6	present	32
3.36.1.7	reserved	32
3.36.1.8	type	32
3.36.1.9	valueA	32
3.36.1.10	valueB	32
3.37	fc2TriggerDelayInfo Struct Reference	32
3.37.1	Field Documentation	33
3.37.1.1	absMax	33
3.37.1.2	absMin	33
3.37.1.3	absValSupported	33
3.37.1.4	autoSupported	33
3.37.1.5	manualSupported	33
3.37.1.6	max	33
3.37.1.7	min	33
3.37.1.8	onePushSupported	33
3.37.1.9	onOffSupported	33
3.37.1.10	present	33
3.37.1.11	pUnitAbbr	33
3.37.1.12	pUnits	33
3.37.1.13	readOutSupported	33
3.37.1.14	reserved	33
3.37.1.15	type	33
3.38	fc2TriggerMode Struct Reference	34
3.38.1	Field Documentation	34
3.38.1.1	mode	34
3.38.1.2	onOff	34
3.38.1.3	parameter	34
3.38.1.4	polarity	34
3.38.1.5	reserved	34

3.38.1.6	source	34
3.39	fc2TriggerModelInfo Struct Reference	34
3.39.1	Field Documentation	35
3.39.1.1	modeMask	35
3.39.1.2	onOffSupported	35
3.39.1.3	polaritySupported	35
3.39.1.4	present	35
3.39.1.5	readOutSupported	35
3.39.1.6	reserved	35
3.39.1.7	softwareTriggerSupported	35
3.39.1.8	sourceMask	35
3.39.1.9	valueReadable	35
3.40	fc2Version Struct Reference	35
3.40.1	Field Documentation	35
3.40.1.1	build	35
3.40.1.2	major	35
3.40.1.3	minor	35
3.40.1.4	type	35
<b>4</b>	<b>File Documentation</b>	<b>37</b>
4.1	FlyCapture2_C.h File Reference	37
4.1.1	Function Documentation	46
4.1.1.1	fc2AVIAppend	46
4.1.1.2	fc2AVIClose	46
4.1.1.3	fc2AVIOpen	46
4.1.1.4	fc2CalculateImageStatistics	47
4.1.1.5	fc2Connect	47
4.1.1.6	fc2ConvertImage	48
4.1.1.7	fc2ConvertImageTo	48
4.1.1.8	fc2CreateAVI	48
4.1.1.9	fc2CreateContext	48
4.1.1.10	fc2CreateGigEContext	49
4.1.1.11	fc2CreateImage	49
4.1.1.12	fc2CreateImageStatistics	49

4.1.1.13	fc2DestroyAVI	50
4.1.1.14	fc2DestroyContext	50
4.1.1.15	fc2DestroyImage	50
4.1.1.16	fc2DestroyImageStatistics	51
4.1.1.17	fc2DetermineBitsPerPixel	51
4.1.1.18	fc2Disconnect	51
4.1.1.19	fc2DiscoverGigECameras	52
4.1.1.20	fc2EnableLUT	52
4.1.1.21	fc2ErrorToDescription	52
4.1.1.22	fc2FireBusReset	53
4.1.1.23	fc2FireSoftwareTrigger	53
4.1.1.24	fc2FireSoftwareTriggerBroadcast	53
4.1.1.25	fc2ForceAllIPAddressesAutomatically	53
4.1.1.26	fc2ForceIPAddressAutomatically	54
4.1.1.27	fc2ForceIPAddressToCamera	54
4.1.1.28	fc2GetActiveLUTBank	54
4.1.1.29	fc2GetCameraFromIndex	55
4.1.1.30	fc2GetCameraFromSerialNumber	55
4.1.1.31	fc2GetCameraInfo	56
4.1.1.32	fc2GetCameraSerialNumberFromIndex	56
4.1.1.33	fc2GetConfiguration	56
4.1.1.34	fc2GetCycleTime	57
4.1.1.35	fc2GetDefaultColorProcessing	57
4.1.1.36	fc2GetDefaultOutputFormat	57
4.1.1.37	fc2GetDeviceFromIndex	57
4.1.1.38	fc2GetEmbeddedImageInfo	58
4.1.1.39	fc2GetFormat7Configuration	58
4.1.1.40	fc2GetFormat7Info	59
4.1.1.41	fc2GetGigEConfig	59
4.1.1.42	fc2GetGigEImageBinningSettings	59
4.1.1.43	fc2GetGigEImageSettings	59
4.1.1.44	fc2GetGigEImageSettingsInfo	59
4.1.1.45	fc2GetGigEImagingMode	59
4.1.1.46	fc2GetGigEProperty	59

4.1.1.47	fc2GetGigEStreamChannelInfo	60
4.1.1.48	fc2GetGPIOPinDirection	60
4.1.1.49	fc2GetImageData	60
4.1.1.50	fc2GetImageStatistics	61
4.1.1.51	fc2GetImageTimeStamp	61
4.1.1.52	fc2GetInterfaceTypeFromGuid	62
4.1.1.53	fc2GetLibraryVersion	62
4.1.1.54	fc2GetLUTBankInfo	62
4.1.1.55	fc2GetLUTChannel	63
4.1.1.56	fc2GetLUTInfo	63
4.1.1.57	fc2GetMemoryChannel	63
4.1.1.58	fc2GetMemoryChannelInfo	64
4.1.1.59	fc2GetNumOfCameras	64
4.1.1.60	fc2GetNumOfDevices	64
4.1.1.61	fc2GetNumStreamChannels	65
4.1.1.62	fc2GetProperty	65
4.1.1.63	fc2GetPropertyInfo	65
4.1.1.64	fc2GetRegisterString	65
4.1.1.65	fc2GetStrobe	66
4.1.1.66	fc2GetStrobeInfo	66
4.1.1.67	fc2GetSystemInfo	66
4.1.1.68	fc2GetTriggerDelay	67
4.1.1.69	fc2GetTriggerDelayInfo	67
4.1.1.70	fc2GetTriggerMode	67
4.1.1.71	fc2GetTriggerModeInfo	68
4.1.1.72	fc2GetVideoModeAndFrameRate	68
4.1.1.73	fc2GetVideoModeAndFrameRateInfo	68
4.1.1.74	fc2H264Open	69
4.1.1.75	fc2IsCameraControlable	69
4.1.1.76	fc2LaunchBrowser	69
4.1.1.77	fc2LaunchCommand	70
4.1.1.78	fc2LaunchCommandAsync	70
4.1.1.79	fc2LaunchHelp	70
4.1.1.80	fc2MJPEGOpen	71

4.1.1.81	<a href="#">fc2QueryGigElmagingMode</a>	71
4.1.1.82	<a href="#">fc2ReadGVCPMemory</a>	71
4.1.1.83	<a href="#">fc2ReadGVCPRegister</a>	71
4.1.1.84	<a href="#">fc2ReadGVCPRegisterBlock</a>	72
4.1.1.85	<a href="#">fc2ReadRegister</a>	72
4.1.1.86	<a href="#">fc2ReadRegisterBlock</a>	72
4.1.1.87	<a href="#">fc2RegisterCallback</a>	73
4.1.1.88	<a href="#">fc2RescanBus</a>	73
4.1.1.89	<a href="#">fc2RestoreFromMemoryChannel</a>	73
4.1.1.90	<a href="#">fc2RetrieveBuffer</a>	74
4.1.1.91	<a href="#">fc2SavelImage</a>	74
4.1.1.92	<a href="#">fc2SavelImageWithOptions</a>	74
4.1.1.93	<a href="#">fc2SaveToMemoryChannel</a>	75
4.1.1.94	<a href="#">fc2SetActiveLUTBank</a>	75
4.1.1.95	<a href="#">fc2SetCallback</a>	75
4.1.1.96	<a href="#">fc2SetConfiguration</a>	76
4.1.1.97	<a href="#">fc2SetDefaultColorProcessing</a>	76
4.1.1.98	<a href="#">fc2SetDefaultOutputFormat</a>	76
4.1.1.99	<a href="#">fc2SetEmbeddedImageInfo</a>	77
4.1.1.100	<a href="#">fc2SetFormat7Configuration</a>	77
4.1.1.101	<a href="#">fc2SetFormat7ConfigurationPacket</a>	77
4.1.1.102	<a href="#">fc2SetGigEConfig</a>	78
4.1.1.103	<a href="#">fc2SetGigEImageBinningSettings</a>	78
4.1.1.104	<a href="#">fc2SetGigEImageSettings</a>	78
4.1.1.105	<a href="#">fc2SetGigElmagingMode</a>	78
4.1.1.106	<a href="#">fc2SetGigEProperty</a>	78
4.1.1.107	<a href="#">fc2SetGigEStreamChannelInfo</a>	78
4.1.1.108	<a href="#">fc2SetGPIOPinDirection</a>	78
4.1.1.109	<a href="#">fc2SetGPIOPinDirectionBroadcast</a>	79
4.1.1.110	<a href="#">fc2SetImageData</a>	79
4.1.1.111	<a href="#">fc2SetImageDimensions</a>	80
4.1.1.112	<a href="#">fc2SetLUTChannel</a>	80
4.1.1.113	<a href="#">fc2SetProperty</a>	80
4.1.1.114	<a href="#">fc2SetPropertyBroadcast</a>	81



4.1.1.115	<a href="#">fc2SetStrobe</a>	81
4.1.1.116	<a href="#">fc2SetStrobeBroadcast</a>	82
4.1.1.117	<a href="#">fc2SetTriggerDelay</a>	82
4.1.1.118	<a href="#">fc2SetTriggerDelayBroadcast</a>	82
4.1.1.119	<a href="#">fc2SetTriggerMode</a>	83
4.1.1.120	<a href="#">fc2SetTriggerModeBroadcast</a>	83
4.1.1.121	<a href="#">fc2SetUserBuffers</a>	83
4.1.1.122	<a href="#">fc2SetVideoModeAndFrameRate</a>	84
4.1.1.123	<a href="#">fc2StartCapture</a>	84
4.1.1.124	<a href="#">fc2StartCaptureCallback</a>	84
4.1.1.125	<a href="#">fc2StartSyncCapture</a>	85
4.1.1.126	<a href="#">fc2StartSyncCaptureCallback</a>	85
4.1.1.127	<a href="#">fc2StopCapture</a>	85
4.1.1.128	<a href="#">fc2UnregisterCallback</a>	86
4.1.1.129	<a href="#">fc2ValidateFormat7Settings</a>	86
4.1.1.130	<a href="#">fc2WriteGVCPMemory</a>	86
4.1.1.131	<a href="#">fc2WriteGVCPRegister</a>	87
4.1.1.132	<a href="#">fc2WriteGVCPRegisterBlock</a>	87
4.1.1.133	<a href="#">fc2WriteGVCPRegisterBroadcast</a>	87
4.1.1.134	<a href="#">fc2WriteRegister</a>	88
4.1.1.135	<a href="#">fc2WriteRegisterBlock</a>	88
4.1.1.136	<a href="#">fc2WriteRegisterBroadcast</a>	89
4.2	<a href="#">FlyCapture2Defs_C.h File Reference</a>	89
4.2.1	<a href="#">Define Documentation</a>	93
4.2.1.1	<a href="#">FALSE</a>	93
4.2.1.2	<a href="#">FULL_32BIT_VALUE</a>	93
4.2.1.3	<a href="#">MAX_STRING_LENGTH</a>	93
4.2.1.4	<a href="#">TRUE</a>	93
4.2.2	<a href="#">Typedef Documentation</a>	94
4.2.2.1	<a href="#">BOOL</a>	94
4.2.2.2	<a href="#">fc2AsyncCommandCallback</a>	94
4.2.2.3	<a href="#">fc2AVIContext</a>	94
4.2.2.4	<a href="#">fc2BusEventCallback</a>	94
4.2.2.5	<a href="#">fc2CallbackHandle</a>	94

4.2.2.6	<a href="#">fc2Context</a>	94
4.2.2.7	<a href="#">fc2GuiContext</a>	94
4.2.2.8	<a href="#">fc2ImageEventCallback</a>	94
4.2.2.9	<a href="#">fc2ImageImpl</a>	94
4.2.2.10	<a href="#">fc2ImageStatisticsContext</a>	94
4.2.3	<a href="#">Enumeration Type Documentation</a>	94
4.2.3.1	<a href="#">fc2BandwidthAllocation</a>	94
4.2.3.2	<a href="#">fc2BayerTileFormat</a>	95
4.2.3.3	<a href="#">fc2BusCallbackType</a>	95
4.2.3.4	<a href="#">fc2BusSpeed</a>	95
4.2.3.5	<a href="#">fc2ByteOrder</a>	96
4.2.3.6	<a href="#">fc2ColorProcessingAlgorithm</a>	96
4.2.3.7	<a href="#">fc2DriverType</a>	96
4.2.3.8	<a href="#">fc2Error</a>	97
4.2.3.9	<a href="#">fc2FrameRate</a>	98
4.2.3.10	<a href="#">fc2GigEPropertyType</a>	98
4.2.3.11	<a href="#">fc2GrabMode</a>	99
4.2.3.12	<a href="#">fc2GrabTimeout</a>	99
4.2.3.13	<a href="#">fc2ImageFileFormat</a>	99
4.2.3.14	<a href="#">fc2InterfaceType</a>	99
4.2.3.15	<a href="#">fc2Mode</a>	100
4.2.3.16	<a href="#">fc2OSType</a>	101
4.2.3.17	<a href="#">fc2PCleBusSpeed</a>	101
4.2.3.18	<a href="#">fc2PixelFormat</a>	101
4.2.3.19	<a href="#">fc2PropertyType</a>	102
4.2.3.20	<a href="#">fc2StatisticsChannel</a>	102
4.2.3.21	<a href="#">fc2TIFFCompressionMethod</a>	103
4.2.3.22	<a href="#">fc2VideoMode</a>	103
4.3	<a href="#">FlyCapture2GUI_C.h File Reference</a>	104
4.3.1	<a href="#">Function Documentation</a>	104
4.3.1.1	<a href="#">fc2CreateGUIContext</a>	104
4.3.1.2	<a href="#">fc2DestroyGUIContext</a>	105
4.3.1.3	<a href="#">fc2Disconnect</a>	105
4.3.1.4	<a href="#">fc2GUIConnect</a>	105

4.3.1.5	<a href="#">fc2Hide</a>	105
4.3.1.6	<a href="#">fc2IsVisible</a>	106
4.3.1.7	<a href="#">fc2Show</a>	106
4.3.1.8	<a href="#">fc2ShowModal</a>	106
4.4	<a href="#">FlyCapture2Internal_C.h File Reference</a>	107
4.4.1	<a href="#">Function Documentation</a>	107
4.4.1.1	<a href="#">IsContextValid</a>	107
4.4.1.2	<a href="#">IsGuiContextValid</a>	107
4.4.1.3	<a href="#">SyncCpplImageToStruct</a>	107
4.5	<a href="#">FlyCapture2Platform_C.h File Reference</a>	107
4.5.1	<a href="#">Define Documentation</a>	107
4.5.1.1	<a href="#">FLYCAPTURE2_C_API</a>	107
4.5.1.2	<a href="#">FLYCAPTURE2_C_CALL_CONVEN</a>	107
4.6	<a href="#">MultiSyncLibrary_C.h File Reference</a>	107
4.6.1	<a href="#">Function Documentation</a>	108
4.6.1.1	<a href="#">syncCreateContext</a>	108
4.6.1.2	<a href="#">syncDestroyContext</a>	109
4.6.1.3	<a href="#">syncDisableCrossPCSSynchronization</a>	109
4.6.1.4	<a href="#">syncEnableCrossPCSSynchronization</a>	109
4.6.1.5	<a href="#">syncGetStatus</a>	109
4.6.1.6	<a href="#">syncGetTimeSinceSynced</a>	110
4.6.1.7	<a href="#">syncIsTimingBusConnected</a>	110
4.6.1.8	<a href="#">syncQueryCrossPCSSynchronizationSetting</a>	110
4.6.1.9	<a href="#">syncRescanMasterTimingBus</a>	111
4.6.1.10	<a href="#">syncStart</a>	111
4.6.1.11	<a href="#">syncStop</a>	111
4.7	<a href="#">MultiSyncLibraryDefs_C.h File Reference</a>	111
4.7.1	<a href="#">Define Documentation</a>	112
4.7.1.1	<a href="#">FALSE</a>	112
4.7.1.2	<a href="#">FULL_32BIT_VALUE</a>	112
4.7.1.3	<a href="#">MAX_STRING_LENGTH</a>	112
4.7.1.4	<a href="#">TRUE</a>	112
4.7.2	<a href="#">Typedef Documentation</a>	112
4.7.2.1	<a href="#">BOOL</a>	112

4.7.2.2	<a href="#">syncContext</a>	112
4.7.3	<a href="#">Enumeration Type Documentation</a>	113
4.7.3.1	<a href="#">syncError</a>	113
4.7.3.2	<a href="#">syncMessage</a>	113
4.8	<a href="#">MultiSyncLibraryPlatform_C.h File Reference</a>	113
4.8.1	<a href="#">Define Documentation</a>	113
4.8.1.1	<a href="#">MULTISYNCLIBRARY_C_API</a>	113
4.8.1.2	<a href="#">MULTISYNCLIBRARY_C_CALL_CONVEN</a>	113

# Chapter 1

## Data Structure Index

### 1.1 Data Structures

Here are the data structures with brief descriptions:

<a href="#">fc2AVIOption</a>	5
<a href="#">fc2CameraInfo</a>	6
<a href="#">fc2Config</a>	8
<a href="#">fc2ConfigROM</a>	9
<a href="#">fc2EmbeddedImageInfo</a>	11
<a href="#">fc2EmbeddedImageInfoProperty</a>	12
<a href="#">fc2Format7ImageSettings</a>	12
<a href="#">fc2Format7Info</a>	13
<a href="#">fc2Format7PacketInfo</a>	14
<a href="#">fc2GigEConfig</a>	15
<a href="#">fc2GigEImageSettings</a>	16
<a href="#">fc2GigEImageSettingsInfo</a>	16
<a href="#">fc2GigEProperty</a>	17
<a href="#">fc2GigEStreamChannel</a>	18
<a href="#">fc2H264Option</a>	19
<a href="#">fc2Image</a>	20
<a href="#">fc2ImageMetadata</a>	20
<a href="#">fc2InternalContext</a>	21
<a href="#">fc2InternalGuiContext</a>	22
<a href="#">fc2InternalImageCallback</a>	23
<a href="#">fc2IPAddress</a>	23
<a href="#">fc2JPEGOption</a>	24
<a href="#">fc2JPG2Option</a>	24
<a href="#">fc2LUTData</a>	25
<a href="#">fc2MACAddress</a>	25
<a href="#">fc2MJPGOption</a>	26
<a href="#">fc2PGMOption</a>	26
<a href="#">fc2PGRGuid</a>	
A GUID to the camera	27

fc2PNGOption . . . . .	27
fc2PPMOption . . . . .	28
fc2StrobeControl . . . . .	28
fc2StrobeInfo . . . . .	29
fc2SystemInfo . . . . .	29
fc2TIFFOption . . . . .	30
fc2TimeStamp . . . . .	31
fc2TriggerDelay . . . . .	31
fc2TriggerDelayInfo . . . . .	32
fc2TriggerMode . . . . .	34
fc2TriggerModeInfo . . . . .	34
fc2Version . . . . .	35

## Chapter 2

# File Index

### 2.1 File List

Here is a list of all files with brief descriptions:

<a href="#">FlyCapture2_C.h</a>	37
<a href="#">FlyCapture2Defs_C.h</a>	89
<a href="#">FlyCapture2GUI_C.h</a>	104
<a href="#">FlyCapture2Internal_C.h</a>	107
<a href="#">FlyCapture2Platform_C.h</a>	107
<a href="#">MultiSyncLibrary_C.h</a>	107
<a href="#">MultiSyncLibraryDefs_C.h</a>	111
<a href="#">MultiSyncLibraryPlatform_C.h</a>	113





## Chapter 3

# Data Structure Documentation

### 3.1 fc2AVIOption Struct Reference

#### Data Fields

- float [frameRate](#)
- unsigned int [reserved](#) [256]

#### 3.1.1 Field Documentation

##### 3.1.1.1 float frameRate

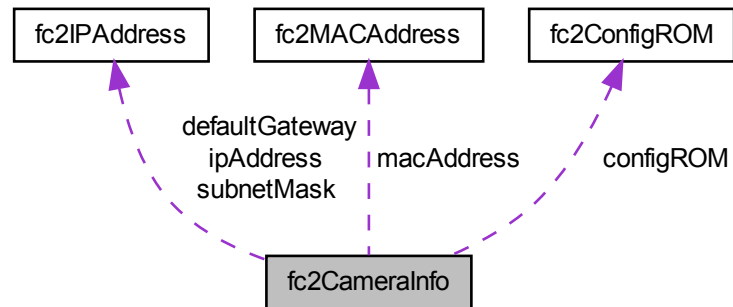
##### 3.1.1.2 unsigned int reserved[256]

The documentation for this struct was generated from the following file:

- [FlyCapture2Defs\\_C.h](#)

## 3.2 fc2CameraInfo Struct Reference

Collaboration diagram for fc2CameraInfo:



### Data Fields

- unsigned int [serialNumber](#)
- [fc2InterfaceType](#) interfaceType
- [fc2DriverType](#) driverType
- [BOOL](#) isColorCamera
- char [modelName](#) [MAX\_STRING\_LENGTH]
- char [vendorName](#) [MAX\_STRING\_LENGTH]
- char [sensorInfo](#) [MAX\_STRING\_LENGTH]
- char [sensorResolution](#) [MAX\_STRING\_LENGTH]
- char [driverName](#) [MAX\_STRING\_LENGTH]
- char [firmwareVersion](#) [MAX\_STRING\_LENGTH]
- char [firmwareBuildTime](#) [MAX\_STRING\_LENGTH]
- [fc2BusSpeed](#) maximumBusSpeed
- [fc2PCleBusSpeed](#) pcieBusSpeed
- [fc2BayerTileFormat](#) bayerTileFormat
- unsigned short [busNumber](#)
- unsigned short [nodeNumber](#)
- unsigned int [iicVer](#)
- [fc2ConfigROM](#) configROM
- unsigned int [gigEMajorVersion](#)
- unsigned int [gigEMinorVersion](#)
- char [userDefinedName](#) [MAX\_STRING\_LENGTH]
- char [xmlURL1](#) [MAX\_STRING\_LENGTH]
- char [xmlURL2](#) [MAX\_STRING\_LENGTH]

- [fc2MACAddress](#) `macAddress`
- [fc2IPAddress](#) `ipAddress`
- [fc2IPAddress](#) `subnetMask`
- [fc2IPAddress](#) `defaultGateway`
- unsigned int [ccpStatus](#)  
*Status/Content of CCP register.*
- unsigned int [applicationIPAddress](#)  
*Local Application IP Address.*
- unsigned int [applicationPort](#)  
*Local Application port.*
- unsigned int [reserved](#) [16]

### 3.2.1 Field Documentation

#### 3.2.1.1 unsigned int `applicationIPAddress`

Local Application IP Address.

#### 3.2.1.2 unsigned int `applicationPort`

Local Application port.

#### 3.2.1.3 `fc2BayerTileFormat` `bayerTileFormat`

#### 3.2.1.4 unsigned short `busNumber`

#### 3.2.1.5 unsigned int `ccpStatus`

Status/Content of CCP register.

#### 3.2.1.6 `fc2ConfigROM` `configROM`

#### 3.2.1.7 `fc2IPAddress` `defaultGateway`

#### 3.2.1.8 char `driverName`[MAX\_STRING\_LENGTH]

#### 3.2.1.9 `fc2DriverType` `driverType`

#### 3.2.1.10 char `firmwareBuildTime`[MAX\_STRING\_LENGTH]

#### 3.2.1.11 char `firmwareVersion`[MAX\_STRING\_LENGTH]

#### 3.2.1.12 unsigned int `gigEMajorVersion`

- 3.2.1.13 unsigned int `gigEMinorVersion`
- 3.2.1.14 unsigned int `iidcVer`
- 3.2.1.15 `fc2InterfaceType` `interfaceType`
- 3.2.1.16 `fc2IPAddress` `ipAddress`
- 3.2.1.17 `BOOL` `isColorCamera`
- 3.2.1.18 `fc2MACAddress` `macAddress`
- 3.2.1.19 `fc2BusSpeed` `maximumBusSpeed`
- 3.2.1.20 `char` `modelName`[MAX\_STRING\_LENGTH]
- 3.2.1.21 unsigned short `nodeNumber`
- 3.2.1.22 `fc2PCleBusSpeed` `pcieBusSpeed`
- 3.2.1.23 unsigned int `reserved`[16]
- 3.2.1.24 `char` `sensorInfo`[MAX\_STRING\_LENGTH]
- 3.2.1.25 `char` `sensorResolution`[MAX\_STRING\_LENGTH]
- 3.2.1.26 unsigned int `serialNumber`
- 3.2.1.27 `fc2IPAddress` `subnetMask`
- 3.2.1.28 `char` `userDefinedName`[MAX\_STRING\_LENGTH]
- 3.2.1.29 `char` `vendorName`[MAX\_STRING\_LENGTH]
- 3.2.1.30 `char` `xmIURL1`[MAX\_STRING\_LENGTH]
- 3.2.1.31 `char` `xmIURL2`[MAX\_STRING\_LENGTH]

The documentation for this struct was generated from the following file:

- [FlyCapture2Defs\\_C.h](#)

### 3.3 `fc2Config` Struct Reference

#### Data Fields

- unsigned int `numBuffers`

- unsigned int [numImageNotifications](#)
- unsigned int [minNumImageNotifications](#)
- int [grabTimeout](#)
- [fc2GrabMode](#) [grabMode](#)
- [fc2BusSpeed](#) [isochBusSpeed](#)
- [fc2BusSpeed](#) [asyncBusSpeed](#)
- [fc2BandwidthAllocation](#) [bandwidthAllocation](#)
- unsigned int [registerTimeoutRetries](#)
- unsigned int [registerTimeout](#)
- unsigned int [reserved](#) [16]

### 3.3.1 Field Documentation

#### 3.3.1.1 [fc2BusSpeed](#) [asyncBusSpeed](#)

#### 3.3.1.2 [fc2BandwidthAllocation](#) [bandwidthAllocation](#)

#### 3.3.1.3 [fc2GrabMode](#) [grabMode](#)

#### 3.3.1.4 int [grabTimeout](#)

#### 3.3.1.5 [fc2BusSpeed](#) [isochBusSpeed](#)

#### 3.3.1.6 unsigned int [minNumImageNotifications](#)

#### 3.3.1.7 unsigned int [numBuffers](#)

#### 3.3.1.8 unsigned int [numImageNotifications](#)

#### 3.3.1.9 unsigned int [registerTimeout](#)

#### 3.3.1.10 unsigned int [registerTimeoutRetries](#)

#### 3.3.1.11 unsigned int [reserved](#)[16]

The documentation for this struct was generated from the following file:

- [FlyCapture2Defs\\_C.h](#)

## 3.4 fc2ConfigROM Struct Reference

### Data Fields

- unsigned int [nodeVendorId](#)
- unsigned int [chipIdHi](#)

- unsigned int [chipIdLo](#)
- unsigned int [unitSpecId](#)
- unsigned int [unitSWVer](#)
- unsigned int [unitSubSWVer](#)
- unsigned int [vendorUniqueInfo\\_0](#)
- unsigned int [vendorUniqueInfo\\_1](#)
- unsigned int [vendorUniqueInfo\\_2](#)
- unsigned int [vendorUniqueInfo\\_3](#)
- char [pszKeyword](#) [MAX\_STRING\_LENGTH]
- unsigned int [reserved](#) [16]

### 3.4.1 Field Documentation

3.4.1.1 unsigned int [chipIdHi](#)

3.4.1.2 unsigned int [chipIdLo](#)

3.4.1.3 unsigned int [nodeVendorId](#)

3.4.1.4 char [pszKeyword](#)[MAX\_STRING\_LENGTH]

3.4.1.5 unsigned int [reserved](#)[16]

3.4.1.6 unsigned int [unitSpecId](#)

3.4.1.7 unsigned int [unitSubSWVer](#)

3.4.1.8 unsigned int [unitSWVer](#)

3.4.1.9 unsigned int [vendorUniqueInfo\\_0](#)

3.4.1.10 unsigned int [vendorUniqueInfo\\_1](#)

3.4.1.11 unsigned int [vendorUniqueInfo\\_2](#)

3.4.1.12 unsigned int [vendorUniqueInfo\\_3](#)

The documentation for this struct was generated from the following file:

- [FlyCapture2Defs\\_C.h](#)

## 3.5 fc2EmbeddedImageInfo Struct Reference

Collaboration diagram for fc2EmbeddedImageInfo:



### Data Fields

- [fc2EmbeddedImageInfoProperty timestamp](#)
- [fc2EmbeddedImageInfoProperty gain](#)
- [fc2EmbeddedImageInfoProperty shutter](#)
- [fc2EmbeddedImageInfoProperty brightness](#)
- [fc2EmbeddedImageInfoProperty exposure](#)
- [fc2EmbeddedImageInfoProperty whiteBalance](#)
- [fc2EmbeddedImageInfoProperty frameCounter](#)
- [fc2EmbeddedImageInfoProperty strobePattern](#)
- [fc2EmbeddedImageInfoProperty GPIOPinState](#)
- [fc2EmbeddedImageInfoProperty ROIPosition](#)

### 3.5.1 Field Documentation

#### 3.5.1.1 fc2EmbeddedImageInfoProperty brightness

- 3.5.1.2 `fc2EmbeddedImageInfoProperty` exposure
- 3.5.1.3 `fc2EmbeddedImageInfoProperty` frameCounter
- 3.5.1.4 `fc2EmbeddedImageInfoProperty` gain
- 3.5.1.5 `fc2EmbeddedImageInfoProperty` GPIOPinState
- 3.5.1.6 `fc2EmbeddedImageInfoProperty` ROIPosition
- 3.5.1.7 `fc2EmbeddedImageInfoProperty` shutter
- 3.5.1.8 `fc2EmbeddedImageInfoProperty` strobePattern
- 3.5.1.9 `fc2EmbeddedImageInfoProperty` timestamp
- 3.5.1.10 `fc2EmbeddedImageInfoProperty` whiteBalance

The documentation for this struct was generated from the following file:

- [FlyCapture2Defs\\_C.h](#)

## 3.6 `fc2EmbeddedImageInfoProperty` Struct Reference

### Data Fields

- [BOOL](#) available
- [BOOL](#) onOff

### 3.6.1 Field Documentation

- 3.6.1.1 **BOOL** available
- 3.6.1.2 **BOOL** onOff

The documentation for this struct was generated from the following file:

- [FlyCapture2Defs\\_C.h](#)

## 3.7 `fc2Format7ImageSettings` Struct Reference

### Data Fields

- [fc2Mode](#) mode



- unsigned int [offsetX](#)
- unsigned int [offsetY](#)
- unsigned int [width](#)
- unsigned int [height](#)
- [fc2PixelFormat](#) [pixelFormat](#)
- unsigned int [reserved](#) [8]

### 3.7.1 Field Documentation

3.7.1.1 unsigned int [height](#)

3.7.1.2 [fc2Mode](#) [mode](#)

3.7.1.3 unsigned int [offsetX](#)

3.7.1.4 unsigned int [offsetY](#)

3.7.1.5 [fc2PixelFormat](#) [pixelFormat](#)

3.7.1.6 unsigned int [reserved](#)[8]

3.7.1.7 unsigned int [width](#)

The documentation for this struct was generated from the following file:

- [FlyCapture2Defs\\_C.h](#)

## 3.8 fc2Format7Info Struct Reference

### Data Fields

- [fc2Mode](#) [mode](#)
- unsigned int [maxWidth](#)
- unsigned int [maxHeight](#)
- unsigned int [offsetHStepSize](#)
- unsigned int [offsetVStepSize](#)
- unsigned int [imageHStepSize](#)
- unsigned int [imageVStepSize](#)
- unsigned int [pixelFormatBitField](#)
- unsigned int [vendorPixelFormatBitField](#)
- unsigned int [packetSize](#)
- unsigned int [minPacketSize](#)
- unsigned int [maxPacketSize](#)
- float [percentage](#)
- unsigned int [reserved](#) [16]

### 3.8.1 Field Documentation

3.8.1.1 unsigned int imageHStepSize

3.8.1.2 unsigned int imageVStepSize

3.8.1.3 unsigned int maxHeight

3.8.1.4 unsigned int maxPacketSize

3.8.1.5 unsigned int maxWidth

3.8.1.6 unsigned int minPacketSize

3.8.1.7 fc2Mode mode

3.8.1.8 unsigned int offsetHStepSize

3.8.1.9 unsigned int offsetVStepSize

3.8.1.10 unsigned int packetSize

3.8.1.11 float percentage

3.8.1.12 unsigned int pixelFormatBitField

3.8.1.13 unsigned int reserved[16]

3.8.1.14 unsigned int vendorPixelFormatBitField

The documentation for this struct was generated from the following file:

- [FlyCapture2Defs\\_C.h](#)

## 3.9 fc2Format7PacketInfo Struct Reference

### Data Fields

- unsigned int [recommendedBytesPerPacket](#)
- unsigned int [maxBytesPerPacket](#)
- unsigned int [unitBytesPerPacket](#)
- unsigned int [reserved](#) [8]

### 3.9.1 Field Documentation

3.9.1.1 unsigned int `maxBytesPerPacket`

3.9.1.2 unsigned int `recommendedBytesPerPacket`

3.9.1.3 unsigned int `reserved`[8]

3.9.1.4 unsigned int `unitBytesPerPacket`

The documentation for this struct was generated from the following file:

- [FlyCapture2Defs\\_C.h](#)

## 3.10 fc2GigEConfig Struct Reference

### Data Fields

- [BOOL](#) `enablePacketResend`  
*Turn on/off packet resend functionality.*
- unsigned int [timeoutForPacketResend](#)  
*The number of milliseconds to wait for each requested packet.*
- unsigned int [maxPacketsToResend](#)  
*The max number of packets that can be requested to be resend.*
- unsigned int [reserved](#) [8]

### 3.10.1 Field Documentation

#### 3.10.1.1 **BOOL** `enablePacketResend`

Turn on/off packet resend functionality.

#### 3.10.1.2 unsigned int `maxPacketsToResend`

The max number of packets that can be requested to be resend.

#### 3.10.1.3 unsigned int `reserved`[8]

#### 3.10.1.4 unsigned int `timeoutForPacketResend`

The number of milliseconds to wait for each requested packet.

The documentation for this struct was generated from the following file:

- [FlyCapture2Defs\\_C.h](#)

## 3.11 fc2GigEImageSettings Struct Reference

### Data Fields

- unsigned int [offsetX](#)
- unsigned int [offsetY](#)
- unsigned int [width](#)
- unsigned int [height](#)
- [fc2PixelFormat](#) [pixelFormat](#)
- unsigned int [reserved](#) [8]

### 3.11.1 Field Documentation

3.11.1.1 unsigned int [height](#)

3.11.1.2 unsigned int [offsetX](#)

3.11.1.3 unsigned int [offsetY](#)

3.11.1.4 [fc2PixelFormat](#) [pixelFormat](#)

3.11.1.5 unsigned int [reserved](#)[8]

3.11.1.6 unsigned int [width](#)

The documentation for this struct was generated from the following file:

- [FlyCapture2Defs\\_C.h](#)

## 3.12 fc2GigEImageSettingsInfo Struct Reference

### Data Fields

- unsigned int [maxWidth](#)
- unsigned int [maxHeight](#)
- unsigned int [offsetHStepSize](#)
- unsigned int [offsetVStepSize](#)
- unsigned int [imageHStepSize](#)
- unsigned int [imageVStepSize](#)
- unsigned int [pixelFormatBitField](#)
- unsigned int [vendorPixelFormatBitField](#)
- unsigned int [reserved](#) [16]

### 3.12.1 Field Documentation

3.12.1.1 unsigned int imageHStepSize

3.12.1.2 unsigned int imageVStepSize

3.12.1.3 unsigned int maxHeight

3.12.1.4 unsigned int maxWidth

3.12.1.5 unsigned int offsetHStepSize

3.12.1.6 unsigned int offsetVStepSize

3.12.1.7 unsigned int pixelFormatBitField

3.12.1.8 unsigned int reserved[16]

3.12.1.9 unsigned int vendorPixelFormatBitField

The documentation for this struct was generated from the following file:

- [FlyCapture2Defs\\_C.h](#)

## 3.13 fc2GigEProperty Struct Reference

### Data Fields

- [fc2GigEPropertyType propType](#)
- [BOOL isReadable](#)
- [BOOL isWritable](#)
- unsigned int [min](#)
- unsigned int [max](#)
- unsigned int [value](#)
- unsigned int [reserved](#) [8]

### 3.13.1 Field Documentation

3.13.1.1 [BOOL isReadable](#)

3.13.1.2 [BOOL isWritable](#)

3.13.1.3 unsigned int [max](#)

3.13.1.4 unsigned int [min](#)

### 3.13.1.5 fc2GigEPropertyType propType

### 3.13.1.6 unsigned int reserved[8]

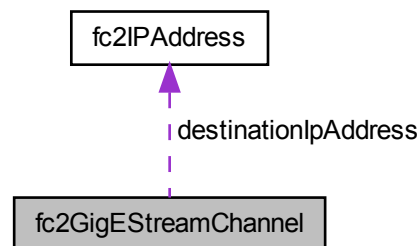
### 3.13.1.7 unsigned int value

The documentation for this struct was generated from the following file:

- [FlyCapture2Defs\\_C.h](#)

## 3.14 fc2GigEStreamChannel Struct Reference

Collaboration diagram for fc2GigEStreamChannel:



### Data Fields

- unsigned int [networkInterfaceIndex](#)
- unsigned int [hostPost](#)
- [BOOL](#) [doNotFragment](#)
- unsigned int [packetSize](#)
- unsigned int [interPacketDelay](#)
- [fc2IPAddress](#) [destinationIpAddress](#)
- unsigned int [sourcePort](#)
- unsigned int [reserved](#) [8]

### 3.14.1 Field Documentation

#### 3.14.1.1 fc2IPAddress destinationIpAddress

3.14.1.2 **BOOL doNotFragment**

3.14.1.3 **unsigned int hostPost**

3.14.1.4 **unsigned int interPacketDelay**

3.14.1.5 **unsigned int networkInterfaceIndex**

3.14.1.6 **unsigned int packetSize**

3.14.1.7 **unsigned int reserved[8]**

3.14.1.8 **unsigned int sourcePort**

The documentation for this struct was generated from the following file:

- [FlyCapture2Defs\\_C.h](#)

## 3.15 fc2H264Option Struct Reference

### Data Fields

- float [frameRate](#)
- unsigned int [width](#)
- unsigned int [height](#)
- unsigned int [bitrate](#)
- unsigned int [reserved](#) [256]

### 3.15.1 Field Documentation

3.15.1.1 **unsigned int bitrate**

3.15.1.2 **float frameRate**

3.15.1.3 **unsigned int height**

3.15.1.4 **unsigned int reserved[256]**

3.15.1.5 **unsigned int width**

The documentation for this struct was generated from the following file:

- [FlyCapture2Defs\\_C.h](#)

## 3.16 fc2Image Struct Reference

### Data Fields

- unsigned int [rows](#)
- unsigned int [cols](#)
- unsigned int [stride](#)
- unsigned char \* [pData](#)
- unsigned int [dataSize](#)
- unsigned int [receivedDataSize](#)
- [fc2PixelFormat](#) format
- [fc2BayerTileFormat](#) bayerFormat
- [fc2ImageImpl](#) imageImpl

### 3.16.1 Field Documentation

#### 3.16.1.1 [fc2BayerTileFormat](#) bayerFormat

#### 3.16.1.2 unsigned int cols

#### 3.16.1.3 unsigned int dataSize

#### 3.16.1.4 [fc2PixelFormat](#) format

#### 3.16.1.5 [fc2ImageImpl](#) imageImpl

#### 3.16.1.6 unsigned char\* pData

#### 3.16.1.7 unsigned int receivedDataSize

#### 3.16.1.8 unsigned int rows

#### 3.16.1.9 unsigned int stride

The documentation for this struct was generated from the following file:

- [FlyCapture2Defs\\_C.h](#)

## 3.17 fc2ImageMetadata Struct Reference

### Data Fields

- unsigned int [embeddedTimeStamp](#)
- unsigned int [embeddedGain](#)
- unsigned int [embeddedShutter](#)



- unsigned int [embeddedBrightness](#)
- unsigned int [embeddedExposure](#)
- unsigned int [embeddedWhiteBalance](#)
- unsigned int [embeddedFrameCounter](#)
- unsigned int [embeddedStrobePattern](#)
- unsigned int [embeddedGPIOPinState](#)
- unsigned int [embeddedROIPosition](#)
- unsigned int [reserved](#) [31]

### 3.17.1 Field Documentation

- 3.17.1.1 unsigned int [embeddedBrightness](#)
- 3.17.1.2 unsigned int [embeddedExposure](#)
- 3.17.1.3 unsigned int [embeddedFrameCounter](#)
- 3.17.1.4 unsigned int [embeddedGain](#)
- 3.17.1.5 unsigned int [embeddedGPIOPinState](#)
- 3.17.1.6 unsigned int [embeddedROIPosition](#)
- 3.17.1.7 unsigned int [embeddedShutter](#)
- 3.17.1.8 unsigned int [embeddedStrobePattern](#)
- 3.17.1.9 unsigned int [embeddedTimeStamp](#)
- 3.17.1.10 unsigned int [embeddedWhiteBalance](#)
- 3.17.1.11 unsigned int [reserved](#)[31]

The documentation for this struct was generated from the following file:

- [FlyCapture2Defs\\_C.h](#)

## 3.18 fc2InternalContext Struct Reference

### Data Fields

- FlyCapture2::BusManager \* [pBusMgr](#)
- FlyCapture2::CameraBase \* [pCamera](#)

### 3.18.1 Field Documentation

#### 3.18.1.1 FlyCapture2::BusManager\* pBusMgr

#### 3.18.1.2 FlyCapture2::CameraBase\* pCamera

The documentation for this struct was generated from the following file:

- [FlyCapture2Internal\\_C.h](#)

## 3.19 fc2InternalGuiContext Struct Reference

### Data Fields

- FlyCapture2::CameraSelectionDlg \* [pCameraSelectionDlg](#)
- FlyCapture2::CameraControlDlg \* [pCameraControlDlg](#)

### 3.19.1 Field Documentation

#### 3.19.1.1 FlyCapture2::CameraControlDlg\* pCameraControlDlg

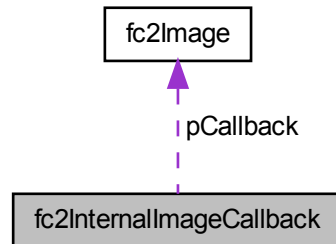
#### 3.19.1.2 FlyCapture2::CameraSelectionDlg\* pCameraSelectionDlg

The documentation for this struct was generated from the following file:

- [FlyCapture2Internal\\_C.h](#)

## 3.20 fc2InternalImageCallback Struct Reference

Collaboration diagram for fc2InternalImageCallback:



### Data Fields

- [fc2ImageEventCallback](#) pCallback
- void \* [pCallbackData](#)

#### 3.20.1 Field Documentation

3.20.1.1 [fc2ImageEventCallback](#) pCallback

3.20.1.2 void\* [pCallbackData](#)

The documentation for this struct was generated from the following file:

- [FlyCapture2Internal\\_C.h](#)

## 3.21 fc2IPAddress Struct Reference

### Data Fields

- unsigned char [octets](#) [4]

#### 3.21.1 Field Documentation

#### 3.21.1.1 unsigned char octets[4]

The documentation for this struct was generated from the following file:

- [FlyCapture2Defs\\_C.h](#)

### 3.22 fc2JPEGOption Struct Reference

#### Data Fields

- [BOOL progressive](#)
- unsigned int [quality](#)
- unsigned int [reserved](#) [16]

#### 3.22.1 Field Documentation

##### 3.22.1.1 BOOL progressive

##### 3.22.1.2 unsigned int quality

##### 3.22.1.3 unsigned int reserved[16]

The documentation for this struct was generated from the following file:

- [FlyCapture2Defs\\_C.h](#)

### 3.23 fc2JPG2Option Struct Reference

#### Data Fields

- unsigned int [quality](#)
- unsigned int [reserved](#) [16]

#### 3.23.1 Field Documentation

##### 3.23.1.1 unsigned int quality

##### 3.23.1.2 unsigned int reserved[16]

The documentation for this struct was generated from the following file:

- [FlyCapture2Defs\\_C.h](#)

## 3.24 fc2LUTData Struct Reference

### Data Fields

- [BOOL supported](#)
- [BOOL enabled](#)
- unsigned int [numBanks](#)
- unsigned int [numChannels](#)
- unsigned int [inputBitDepth](#)
- unsigned int [outputBitDepth](#)
- unsigned int [numEntries](#)
- unsigned int [reserved](#) [8]

### 3.24.1 Field Documentation

#### 3.24.1.1 [BOOL enabled](#)

#### 3.24.1.2 [unsigned int inputBitDepth](#)

#### 3.24.1.3 [unsigned int numBanks](#)

#### 3.24.1.4 [unsigned int numChannels](#)

#### 3.24.1.5 [unsigned int numEntries](#)

#### 3.24.1.6 [unsigned int outputBitDepth](#)

#### 3.24.1.7 [unsigned int reserved\[8\]](#)

#### 3.24.1.8 [BOOL supported](#)

The documentation for this struct was generated from the following file:

- [FlyCapture2Defs\\_C.h](#)

## 3.25 fc2MACAddress Struct Reference

### Data Fields

- unsigned char [octets](#) [6]

### 3.25.1 Field Documentation

### 3.25.1.1 unsigned char octets[6]

The documentation for this struct was generated from the following file:

- [FlyCapture2Defs\\_C.h](#)

## 3.26 fc2MJPGOption Struct Reference

### Data Fields

- float [frameRate](#)
- unsigned int [quality](#)
- unsigned int [reserved](#) [256]

### 3.26.1 Field Documentation

#### 3.26.1.1 float frameRate

#### 3.26.1.2 unsigned int quality

#### 3.26.1.3 unsigned int reserved[256]

The documentation for this struct was generated from the following file:

- [FlyCapture2Defs\\_C.h](#)

## 3.27 fc2PGMOption Struct Reference

### Data Fields

- [BOOL](#) [binaryFile](#)
- unsigned int [reserved](#) [16]

### 3.27.1 Field Documentation

#### 3.27.1.1 [BOOL](#) [binaryFile](#)

#### 3.27.1.2 unsigned int reserved[16]

The documentation for this struct was generated from the following file:

- [FlyCapture2Defs\\_C.h](#)

## 3.28 fc2PGRGuid Struct Reference

A GUID to the camera.

### Data Fields

- unsigned int [value](#) [4]

### 3.28.1 Detailed Description

A GUID to the camera.

It is used to uniquely identify a camera.

### 3.28.2 Field Documentation

#### 3.28.2.1 unsigned int [value](#)[4]

The documentation for this struct was generated from the following file:

- [FlyCapture2Defs\\_C.h](#)

## 3.29 fc2PNGOption Struct Reference

### Data Fields

- [BOOL](#) [interlaced](#)
- unsigned int [compressionLevel](#)
- unsigned int [reserved](#) [16]

### 3.29.1 Field Documentation

#### 3.29.1.1 unsigned int [compressionLevel](#)

#### 3.29.1.2 [BOOL](#) [interlaced](#)

#### 3.29.1.3 unsigned int [reserved](#)[16]

The documentation for this struct was generated from the following file:

- [FlyCapture2Defs\\_C.h](#)

### 3.30 fc2PPMOption Struct Reference

#### Data Fields

- [BOOL](#) `binaryFile`
- unsigned int [reserved](#) [16]

#### 3.30.1 Field Documentation

##### 3.30.1.1 [BOOL](#) `binaryFile`

##### 3.30.1.2 unsigned int [reserved](#)[16]

The documentation for this struct was generated from the following file:

- [FlyCapture2Defs\\_C.h](#)

### 3.31 fc2StrobeControl Struct Reference

#### Data Fields

- unsigned int [source](#)
- [BOOL](#) `onOff`
- unsigned int [polarity](#)
- float [delay](#)
- float [duration](#)
- unsigned int [reserved](#) [8]

#### 3.31.1 Field Documentation

##### 3.31.1.1 float [delay](#)

##### 3.31.1.2 float [duration](#)

##### 3.31.1.3 [BOOL](#) `onOff`

##### 3.31.1.4 unsigned int [polarity](#)

##### 3.31.1.5 unsigned int [reserved](#)[8]

##### 3.31.1.6 unsigned int [source](#)

The documentation for this struct was generated from the following file:

- [FlyCapture2Defs\\_C.h](#)



## 3.32 fc2StrobeInfo Struct Reference

### Data Fields

- unsigned int [source](#)
- **BOOL** [present](#)
- **BOOL** [readOutSupported](#)
- **BOOL** [onOffSupported](#)
- **BOOL** [polaritySupported](#)
- float [minValue](#)
- float [maxValue](#)
- unsigned int [reserved](#) [8]

### 3.32.1 Field Documentation

3.32.1.1 float [maxValue](#)

3.32.1.2 float [minValue](#)

3.32.1.3 **BOOL** [onOffSupported](#)

3.32.1.4 **BOOL** [polaritySupported](#)

3.32.1.5 **BOOL** [present](#)

3.32.1.6 **BOOL** [readOutSupported](#)

3.32.1.7 unsigned int [reserved](#)[8]

3.32.1.8 unsigned int [source](#)

The documentation for this struct was generated from the following file:

- [FlyCapture2Defs\\_C.h](#)

## 3.33 fc2SystemInfo Struct Reference

### Data Fields

- [fc2OSType](#) [osType](#)
- char [osDescription](#) [MAX\_STRING\_LENGTH]
- [fc2ByteOrder](#) [byteOrder](#)
- size\_t [sysMemSize](#)
- char [cpuDescription](#) [MAX\_STRING\_LENGTH]
- size\_t [numCpuCores](#)

- char [driverList](#) [MAX\_STRING\_LENGTH]
- char [libraryList](#) [MAX\_STRING\_LENGTH]
- char [gpuDescription](#) [MAX\_STRING\_LENGTH]
- size\_t [screenWidth](#)
- size\_t [screenHeight](#)
- unsigned int [reserved](#) [16]

### 3.33.1 Field Documentation

3.33.1.1 **fc2ByteOrder** byteOrder

3.33.1.2 char **cpuDescription**[MAX\_STRING\_LENGTH]

3.33.1.3 char **driverList**[MAX\_STRING\_LENGTH]

3.33.1.4 char **gpuDescription**[MAX\_STRING\_LENGTH]

3.33.1.5 char **libraryList**[MAX\_STRING\_LENGTH]

3.33.1.6 size\_t **numCpuCores**

3.33.1.7 char **osDescription**[MAX\_STRING\_LENGTH]

3.33.1.8 **fc2OSType** osType

3.33.1.9 unsigned int **reserved**[16]

3.33.1.10 size\_t **screenHeight**

3.33.1.11 size\_t **screenWidth**

3.33.1.12 size\_t **sysMemSize**

The documentation for this struct was generated from the following file:

- [FlyCapture2Defs\\_C.h](#)

## 3.34 fc2TIFFOption Struct Reference

### Data Fields

- [fc2TIFFCompressionMethod](#) compression
- unsigned int [reserved](#) [16]

### 3.34.1 Field Documentation

#### 3.34.1.1 fc2TIFFCompressionMethod compression

#### 3.34.1.2 unsigned int reserved[16]

The documentation for this struct was generated from the following file:

- [FlyCapture2Defs\\_C.h](#)

## 3.35 fc2TimeStamp Struct Reference

### Data Fields

- long long [seconds](#)
- unsigned int [microSeconds](#)
- unsigned int [cycleSeconds](#)
- unsigned int [cycleCount](#)
- unsigned int [cycleOffset](#)
- unsigned int [reserved](#) [8]

### 3.35.1 Field Documentation

#### 3.35.1.1 unsigned int cycleCount

#### 3.35.1.2 unsigned int cycleOffset

#### 3.35.1.3 unsigned int cycleSeconds

#### 3.35.1.4 unsigned int microSeconds

#### 3.35.1.5 unsigned int reserved[8]

#### 3.35.1.6 long long seconds

The documentation for this struct was generated from the following file:

- [FlyCapture2Defs\\_C.h](#)

## 3.36 fc2TriggerDelay Struct Reference

### Data Fields

- [fc2PropertyType](#) type

- [BOOL present](#)
- [BOOL absControl](#)
- [BOOL onePush](#)
- [BOOL onOff](#)
- [BOOL autoManualMode](#)
- unsigned int [valueA](#)
- unsigned int [valueB](#)
- float [absValue](#)
- unsigned int [reserved](#) [8]

### 3.36.1 Field Documentation

#### 3.36.1.1 BOOL absControl

#### 3.36.1.2 float absValue

#### 3.36.1.3 BOOL autoManualMode

#### 3.36.1.4 BOOL onePush

#### 3.36.1.5 BOOL onOff

#### 3.36.1.6 BOOL present

#### 3.36.1.7 unsigned int reserved[8]

#### 3.36.1.8 fc2PropertyType type

#### 3.36.1.9 unsigned int valueA

#### 3.36.1.10 unsigned int valueB

The documentation for this struct was generated from the following file:

- [FlyCapture2Defs\\_C.h](#)

## 3.37 fc2TriggerDelayInfo Struct Reference

### Data Fields

- [fc2PropertyType type](#)
- [BOOL present](#)
- [BOOL autoSupported](#)
- [BOOL manualSupported](#)
- [BOOL onOffSupported](#)

- [BOOL onePushSupported](#)
- [BOOL absValSupported](#)
- [BOOL readOutSupported](#)
- unsigned int [min](#)
- unsigned int [max](#)
- float [absMin](#)
- float [absMax](#)
- char [pUnits](#) [MAX\_STRING\_LENGTH]
- char [pUnitAbbr](#) [MAX\_STRING\_LENGTH]
- unsigned int [reserved](#) [8]

### 3.37.1 Field Documentation

3.37.1.1 float [absMax](#)

3.37.1.2 float [absMin](#)

3.37.1.3 **BOOL** [absValSupported](#)

3.37.1.4 **BOOL** [autoSupported](#)

3.37.1.5 **BOOL** [manualSupported](#)

3.37.1.6 unsigned int [max](#)

3.37.1.7 unsigned int [min](#)

3.37.1.8 **BOOL** [onePushSupported](#)

3.37.1.9 **BOOL** [onOffSupported](#)

3.37.1.10 **BOOL** [present](#)

3.37.1.11 char [pUnitAbbr](#)[MAX\_STRING\_LENGTH]

3.37.1.12 char [pUnits](#)[MAX\_STRING\_LENGTH]

3.37.1.13 **BOOL** [readOutSupported](#)

3.37.1.14 unsigned int [reserved](#)[8]

3.37.1.15 **fc2PropertyType** type

The documentation for this struct was generated from the following file:

- [FlyCapture2Defs\\_C.h](#)

## 3.38 fc2TriggerMode Struct Reference

### Data Fields

- [BOOL onOff](#)
- unsigned int [polarity](#)
- unsigned int [source](#)
- unsigned int [mode](#)
- unsigned int [parameter](#)
- unsigned int [reserved](#) [8]

### 3.38.1 Field Documentation

3.38.1.1 unsigned int **mode**

3.38.1.2 **BOOL onOff**

3.38.1.3 unsigned int **parameter**

3.38.1.4 unsigned int **polarity**

3.38.1.5 unsigned int **reserved**[8]

3.38.1.6 unsigned int **source**

The documentation for this struct was generated from the following file:

- [FlyCapture2Defs\\_C.h](#)

## 3.39 fc2TriggerModelInfo Struct Reference

### Data Fields

- [BOOL present](#)
- [BOOL readOutSupported](#)
- [BOOL onOffSupported](#)
- [BOOL polaritySupported](#)
- [BOOL valueReadable](#)
- unsigned int [sourceMask](#)
- [BOOL softwareTriggerSupported](#)
- unsigned int [modeMask](#)
- unsigned int [reserved](#) [8]

### 3.39.1 Field Documentation

3.39.1.1 unsigned int modeMask

3.39.1.2 BOOL onOffSupported

3.39.1.3 BOOL polaritySupported

3.39.1.4 BOOL present

3.39.1.5 BOOL readOutSupported

3.39.1.6 unsigned int reserved[8]

3.39.1.7 BOOL softwareTriggerSupported

3.39.1.8 unsigned int sourceMask

3.39.1.9 BOOL valueReadable

The documentation for this struct was generated from the following file:

- [FlyCapture2Defs\\_C.h](#)

## 3.40 fc2Version Struct Reference

### Data Fields

- unsigned int [major](#)
- unsigned int [minor](#)
- unsigned int [type](#)
- unsigned int [build](#)

### 3.40.1 Field Documentation

3.40.1.1 unsigned int build

3.40.1.2 unsigned int major

3.40.1.3 unsigned int minor

3.40.1.4 unsigned int type

The documentation for this struct was generated from the following file:

- [FlyCapture2Defs\\_C.h](#)





## Chapter 4

# File Documentation

### 4.1 FlyCapture2\_C.h File Reference

#### Functions

- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2CreateContext](#) ([fc2Context](#) \*pContext)  
*Create a FC2 context for IIDC camera.*
- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2CreateGigEContext](#) ([fc2Context](#) \*pContext)  
*Create a FC2 context for a GigE Vision camera.*
- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2DestroyContext](#) ([fc2Context](#) context)  
*Destroy the FC2 context.*
- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2FireBusReset](#) ([fc2Context](#) context, [fc2PGRGuid](#) \*pGuid)  
*Fire a bus reset.*
- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2GetNumOfCameras](#) ([fc2Context](#) context, unsigned int \*pNumCameras)  
*Gets the number of cameras attached to the PC.*
- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2IsCameraControlable](#) ([fc2Context](#) context, [fc2PGRGuid](#) \*pGuid, [BOOL](#) \*pControlable)  
*Query whether a GigE camera is controlable.*
- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2GetCameraFromIndex](#) ([fc2Context](#) context, unsigned int index, [fc2PGRGuid](#) \*pGuid)  
*Gets the PGRGuid for a camera on the PC.*
- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2GetCameraFromSerialNumber](#) ([fc2Context](#) context, unsigned int serialNumber, [fc2PGRGuid](#) \*pGuid)  
*Gets the PGRGuid for a camera on the PC.*
- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2GetCameraSerialNumberFromIndex](#) ([fc2Context](#) context, unsigned int index, unsigned int \*pSerialNumber)  
*Gets the serial number of the camera with the specified index.*

- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2GetInterfaceTypeFromGuid](#) ([fc2Context](#) context, [fc2PGRGuid](#) \*pGuid, [fc2InterfaceType](#) \*pInterfaceType)  
*Gets the interface type associated with a PGRGuid.*
- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2GetNumOfDevices](#) ([fc2Context](#) context, unsigned int \*pNumDevices)  
*Gets the number of devices.*
- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2GetDeviceFromIndex](#) ([fc2Context](#) context, unsigned int index, [fc2PGRGuid](#) \*pGuid)  
*Gets the PGRGuid for a device.*
- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2RegisterCallback](#) ([fc2Context](#) context, [fc2BusEventCallback](#) enumCallback, [fc2BusCallbackType](#) callbackType, void \*pParameter, [fc2CallbackHandle](#) \*pCallbackHandle)  
*Register a callback function that will be called when the specified callback event occurs.*
- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2UnregisterCallback](#) ([fc2Context](#) context, [fc2CallbackHandle](#) callbackHandle)  
*Unregister a callback function.*
- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2RescanBus](#) ([fc2Context](#) context)  
*Force a rescan of the buses.*
- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2ForceIPAddressToCamera](#) ([fc2Context](#) context, [fc2MACAddress](#) macAddress, [fc2IPAddress](#) ipAddress, [fc2IPAddress](#) subnetMask, [fc2IPAddress](#) defaultGateway)  
*Force the camera with the specific MAC address to the specified IP address, subnet mask and default gateway.*
- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2ForceAllIPAddressesAutomatically](#) ()  
*Force all cameras on the network to be assigned sequential IP addresses on the same subnet as the network adapters that they are connected to.*
- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2ForceIPAddressAutomatically](#) (unsigned int serialNumber)  
*Force a cameras on the network to be assigned sequential IP addresses on the same subnet as the network adapters that it is connected to.*
- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2DiscoverGigECameras](#) ([fc2Context](#) context, [fc2CameraInfo](#) \*gigECameras, unsigned int \*arraySize)  
*Discover all cameras connected to the network even if they reside on a different subnet.*
- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2WriteRegister](#) ([fc2Context](#) context, unsigned int address, unsigned int value)  
*Write to the specified register on the camera.*
- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2WriteRegisterBroadcast](#) ([fc2Context](#) context, unsigned int address, unsigned int value)  
*Write to the specified register on the camera with broadcast.*
- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2ReadRegister](#) ([fc2Context](#) context, unsigned int address, unsigned int \*pValue)  
*Read the specified register from the camera.*
- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2WriteRegisterBlock](#) ([fc2Context](#) context, unsigned short addressHigh, unsigned int addressLow, const unsigned int \*pBuffer, unsigned int length)

*Write to the specified register block on the camera.*

- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2ReadRegisterBlock](#) ([fc2Context](#) context, unsigned short addressHigh, unsigned int addressLow, unsigned int \*pBuffer, unsigned int length)

*Write to the specified register block on the camera.*

- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2Connect](#) ([fc2Context](#) context, [fc2PGRGuid](#) \*guid)

*Connects the camera object to the camera specified by the GUID.*

- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2Disconnect](#) ([fc2Context](#) context)

*Disconnects the fc2Context from the camera.*

- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2SetCallback](#) ([fc2Context](#) context, [fc2ImageEventCallback](#) pCallbackFn, void \*pCallbackData)

*Sets the callback data to be used on completion of image transfer.*

- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2StartCapture](#) ([fc2Context](#) context)

*Starts isochronous image capture.*

- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2StartCaptureCallback](#) ([fc2Context](#) context, [fc2ImageEventCallback](#) pCallbackFn, void \*pCallbackData)

*Starts isochronous image capture.*

- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2StartSyncCapture](#) (unsigned int numCameras, [fc2Context](#) \*pContexts)

*Starts synchronized isochronous image capture on multiple cameras.*

- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2StartSyncCaptureCallback](#) (unsigned int numCameras, [fc2Context](#) \*pContexts, [fc2ImageEventCallback](#) \*pCallbackFns, void \*\*pCallbackDataArray)

*Starts synchronized isochronous image capture on multiple cameras.*

- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2RetrieveBuffer](#) ([fc2Context](#) context, [fc2Image](#) \*pImage)

*Retrieves the the next image object containing the next image.*

- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2StopCapture](#) ([fc2Context](#) context)

*Stops isochronous image transfer and cleans up all associated resources.*

- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2SetUserBuffers](#) ([fc2Context](#) context, unsigned char \*const ppMemBuffers, int size, int nNumBuffers)

*Specify user allocated buffers to use as image data buffers.*

- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2GetConfiguration](#) ([fc2Context](#) context, [fc2Config](#) \*config)

*Get the configuration associated with the camera.*

- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2SetConfiguration](#) ([fc2Context](#) context, [fc2Config](#) \*config)

*Set the configuration associated with the camera.*

- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2GetCameraInfo](#) ([fc2Context](#) context, [fc2CameraInfo](#) \*pCameraInfo)

*Retrieves information from the camera such as serial number, model name and other camera information.*

- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2GetPropertyInfo](#) ([fc2Context](#) context, [fc2PropertyInfo](#) \*propInfo)

*Retrieves information about the specified camera property.*

- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2GetProperty](#) ([fc2Context](#) context, [fc2Property](#) \*prop)

*Reads the settings for the specified property from the camera.*

- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2SetProperty](#) ([fc2Context](#) context, [fc2Property](#) \*prop)

*Writes the settings for the specified property to the camera.*

- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2SetPropertyBroadcast](#) ([fc2Context](#) context, [fc2Property](#) \*prop)

*Writes the settings for the specified property to the camera.*

- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2GetGPIOPinDirection](#) ([fc2Context](#) context, unsigned int pin, unsigned int \*pDirection)

*Get the GPIO pin direction for the specified pin.*

- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2SetGPIOPinDirection](#) ([fc2Context](#) context, unsigned int pin, unsigned int direction)

*Set the GPIO pin direction for the specified pin.*

- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2SetGPIOPinDirectionBroadcast](#) ([fc2Context](#) context, unsigned int pin, unsigned int direction)

*Set the GPIO pin direction for the specified pin.*

- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2GetTriggerModelInfo](#) ([fc2Context](#) context, [fc2TriggerModelInfo](#) \*triggerModelInfo)

*Retrieve trigger information from the camera.*

- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2GetTriggerMode](#) ([fc2Context](#) context, [fc2TriggerMode](#) \*triggerMode)

*Retrieve current trigger settings from the camera.*

- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2SetTriggerMode](#) ([fc2Context](#) context, [fc2TriggerMode](#) \*triggerMode)

*Set the specified trigger settings to the camera.*

- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2SetTriggerModeBroadcast](#) ([fc2Context](#) context, [fc2TriggerMode](#) \*triggerMode)

*Set the specified trigger settings to the camera.*

- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2FireSoftwareTrigger](#) ([fc2Context](#) context)
- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2FireSoftwareTriggerBroadcast](#) ([fc2Context](#) context)

*Fire the software trigger according to the DCAM specifications.*

- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2GetTriggerDelayInfo](#) ([fc2Context](#) context, [fc2TriggerDelayInfo](#) \*triggerDelayInfo)

*Retrieve trigger delay information from the camera.*

- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2GetTriggerDelay](#) ([fc2Context](#) context, [fc2TriggerDelay](#) \*triggerDelay)

*Retrieve current trigger delay settings from the camera.*

- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2SetTriggerDelay](#) ([fc2Context](#) context, [fc2TriggerDelay](#) \*triggerDelay)

*Set the specified trigger delay settings to the camera.*

- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2SetTriggerDelayBroadcast](#) ([fc2Context](#) context, [fc2TriggerDelay](#) \*triggerDelay)  
*Set the specified trigger delay settings to the camera.*
- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2GetStrobeInfo](#) ([fc2Context](#) context, [fc2StrobeInfo](#) \*strobeInfo)  
*Retrieve strobe information from the camera.*
- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2GetStrobe](#) ([fc2Context](#) context, [fc2StrobeControl](#) \*strobeControl)  
*Retrieve current strobe settings from the camera.*
- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2SetStrobe](#) ([fc2Context](#) context, [fc2StrobeControl](#) \*strobeControl)  
*Set current strobe settings to the camera.*
- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2SetStrobeBroadcast](#) ([fc2Context](#) context, [fc2StrobeControl](#) \*strobeControl)  
*Set current strobe settings to the camera.*
- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2GetVideoModeAndFrameRateInfo](#) ([fc2Context](#) context, [fc2VideoMode](#) videoMode, [fc2FrameRate](#) frameRate, [BOOL](#) \*pSupported)  
*Query the camera to determine if the specified video mode and frame rate is supported.*
- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2GetVideoModeAndFrameRate](#) ([fc2Context](#) context, [fc2VideoMode](#) \*videoMode, [fc2FrameRate](#) \*frameRate)  
*Get the current video mode and frame rate from the camera.*
- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2SetVideoModeAndFrameRate](#) ([fc2Context](#) context, [fc2VideoMode](#) videoMode, [fc2FrameRate](#) frameRate)  
*Set the specified video mode and frame rate to the camera.*
- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2GetFormat7Info](#) ([fc2Context](#) context, [fc2Format7Info](#) \*info, [BOOL](#) \*pSupported)  
*Retrieve the availability of Format7 custom image mode and the camera capabilities for the specified Format7 mode.*
- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2ValidateFormat7Settings](#) ([fc2Context](#) context, [fc2Format7ImageSettings](#) \*imageSettings, [BOOL](#) \*settingsAreValid, [fc2Format7PacketInfo](#) \*packetInfo)  
*Validates Format7ImageSettings structure and returns valid packet size information if the image settings are valid.*
- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2GetFormat7Configuration](#) ([fc2Context](#) context, [fc2Format7ImageSettings](#) \*imageSettings, unsigned int \*packetSize, float \*percentage)  
*Get the current Format7 configuration from the camera.*
- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2SetFormat7ConfigurationPacket](#) ([fc2Context](#) context, [fc2Format7ImageSettings](#) \*imageSettings, unsigned int packetSize)  
*Set the current Format7 configuration to the camera.*
- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2SetFormat7Configuration](#) ([fc2Context](#) context, [fc2Format7ImageSettings](#) \*imageSettings, float percentSpeed)  
*Set the current Format7 configuration to the camera.*

- FLYCAPTURE2\_C\_API [fc2Error fc2WriteGVCPRegister](#) ([fc2Context](#) context, unsigned int address, unsigned int value)  
*Write a GVCP register.*
- FLYCAPTURE2\_C\_API [fc2Error fc2WriteGVCPRegisterBroadcast](#) ([fc2Context](#) context, unsigned int address, unsigned int value)  
*Write a GVCP register with broadcast.*
- FLYCAPTURE2\_C\_API [fc2Error fc2ReadGVCPRegister](#) ([fc2Context](#) context, unsigned int address, unsigned int \*pValue)  
*Read a GVCP register.*
- FLYCAPTURE2\_C\_API [fc2Error fc2WriteGVCPRegisterBlock](#) ([fc2Context](#) context, unsigned int address, const unsigned int \*pBuffer, unsigned int length)  
*Write a GVCP register block.*
- FLYCAPTURE2\_C\_API [fc2Error fc2ReadGVCPRegisterBlock](#) ([fc2Context](#) context, unsigned int address, unsigned int \*pBuffer, unsigned int length)  
*Read a GVCP register block.*
- FLYCAPTURE2\_C\_API [fc2Error fc2WriteGVCPMemory](#) ([fc2Context](#) context, unsigned int address, const unsigned char \*pBuffer, unsigned int length)  
*Write a GVCP memory block.*
- FLYCAPTURE2\_C\_API [fc2Error fc2ReadGVCPMemory](#) ([fc2Context](#) context, unsigned int address, unsigned char \*pBuffer, unsigned int length)  
*Read a GVCP memory block.*
- FLYCAPTURE2\_C\_API [fc2Error fc2GetGigEProperty](#) ([fc2Context](#) context, [fc2GigEProperty](#) \*pGigEProp)  
*Get the specified GigEProperty.*
- FLYCAPTURE2\_C\_API [fc2Error fc2SetGigEProperty](#) ([fc2Context](#) context, const [fc2GigEProperty](#) \*pGigEProp)  
*Set the specified GigEProperty.*
- FLYCAPTURE2\_C\_API [fc2Error fc2QueryGigEImagingMode](#) ([fc2Context](#) context, [fc2Mode](#) mode, [BOOL](#) \*isSupported)
- FLYCAPTURE2\_C\_API [fc2Error fc2GetGigEImagingMode](#) ([fc2Context](#) context, [fc2Mode](#) \*mode)
- FLYCAPTURE2\_C\_API [fc2Error fc2SetGigEImagingMode](#) ([fc2Context](#) context, [fc2Mode](#) mode)
- FLYCAPTURE2\_C\_API [fc2Error fc2GetGigEImageSettingsInfo](#) ([fc2Context](#) context, [fc2GigEImageSettingsInfo](#) \*pInfo)
- FLYCAPTURE2\_C\_API [fc2Error fc2GetGigEImageSettings](#) ([fc2Context](#) context, [fc2GigEImageSettings](#) \*pImageSettings)
- FLYCAPTURE2\_C\_API [fc2Error fc2SetGigEImageSettings](#) ([fc2Context](#) context, const [fc2GigEImageSettings](#) \*pImageSettings)
- FLYCAPTURE2\_C\_API [fc2Error fc2GetGigEConfig](#) ([fc2Context](#) context, [fc2GigEConfig](#) \*pConfig)
- FLYCAPTURE2\_C\_API [fc2Error fc2SetGigEConfig](#) ([fc2Context](#) context, const [fc2GigEConfig](#) \*pConfig)
- FLYCAPTURE2\_C\_API [fc2Error fc2GetGigEImageBinningSettings](#) ([fc2Context](#) context, unsigned int \*horzBinningValue, unsigned int \*vertBinningValue)

- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2SetGigEImageBinningSettings](#) ([fc2Context](#) context, unsigned int horzBinningValue, unsigned int vertBinningValue)
- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2GetNumStreamChannels](#) ([fc2Context](#) context, unsigned int \*numChannels)
- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2GetGigEStreamChannelInfo](#) ([fc2Context](#) context, unsigned int channel, [fc2GigEStreamChannel](#) \*pChannel)
- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2SetGigEStreamChannelInfo](#) ([fc2Context](#) context, unsigned int channel, [fc2GigEStreamChannel](#) \*pChannel)
- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2GetLUTInfo](#) ([fc2Context](#) context, [fc2LUT-Data](#) \*pData)  
*Query if LUT support is available on the camera.*
- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2GetLUTBankInfo](#) ([fc2Context](#) context, unsigned int bank, [BOOL](#) \*pReadSupported, [BOOL](#) \*pWriteSupported)  
*Query the read/write status of a single LUT bank.*
- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2GetActiveLUTBank](#) ([fc2Context](#) context, unsigned int \*pActiveBank)  
*Get the LUT bank that is currently being used.*
- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2SetActiveLUTBank](#) ([fc2Context](#) context, unsigned int activeBank)  
*Set the LUT bank that will be used.*
- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2EnableLUT](#) ([fc2Context](#) context, [BOOL](#) on)  
*Enable or disable LUT functionality on the camera.*
- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2GetLUTChannel](#) ([fc2Context](#) context, unsigned int bank, unsigned int channel, unsigned int sizeEntries, unsigned int \*pEntries)  
*Get the LUT channel settings from the camera.*
- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2SetLUTChannel](#) ([fc2Context](#) context, unsigned int bank, unsigned int channel, unsigned int sizeEntries, unsigned int \*pEntries)  
*Set the LUT channel settings to the camera.*
- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2GetMemoryChannel](#) ([fc2Context](#) context, unsigned int \*pCurrentChannel)  
*Retrieve the current memory channel from the camera.*
- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2SaveToMemoryChannel](#) ([fc2Context](#) context, unsigned int channel)  
*Save the current settings to the specified current memory channel.*
- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2RestoreFromMemoryChannel](#) ([fc2Context](#) context, unsigned int channel)  
*Restore the specified current memory channel.*
- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2GetMemoryChannelInfo](#) ([fc2Context](#) context, unsigned int \*pNumChannels)  
*Query the camera for memory channel support.*
- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2GetEmbeddedImageInfo](#) ([fc2Context](#) context, [fc2EmbeddedImageInfo](#) \*pInfo)  
*Get the current status of the embedded image information register, as well as the availability of each embedded property.*

- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2SetEmbeddedImageInfo](#) ([fc2Context](#) context, [fc2EmbeddedImageInfo](#) \*pInfo)  
*Sets the on/off values of the embedded image information structure to the camera.*
- FLYCAPTURE2\_C\_API const char \* [fc2GetRegisterString](#) (unsigned int registerVal)  
*Returns a text representation of the register value.*
- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2CreateImage](#) ([fc2Image](#) \*pImage)  
*Create a [fc2Image](#).*
- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2DestroyImage](#) ([fc2Image](#) \*image)  
*Destroy the [fc2Image](#).*
- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2SetDefaultColorProcessing](#) ([fc2ColorProcessingAlgorithm](#) defaultMethod)  
*Set the default color processing algorithm.*
- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2GetDefaultColorProcessing](#) ([fc2ColorProcessingAlgorithm](#) \*pDefaultMethod)  
*Get the default color processing algorithm.*
- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2SetDefaultOutputFormat](#) ([fc2PixelFormat](#) format)  
*Set the default output pixel format.*
- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2GetDefaultOutputFormat](#) ([fc2PixelFormat](#) \*pFormat)  
*Get the default output pixel format.*
- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2DetermineBitsPerPixel](#) ([fc2PixelFormat](#) format, unsigned int \*pBitsPerPixel)  
*Calculate the bits per pixel for the specified pixel format.*
- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2SaveImage](#) ([fc2Image](#) \*pImage, const char \*pFilename, [fc2ImageFileFormat](#) format)  
*Save the image to the specified file name with the file format specified.*
- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2SaveImageWithOptions](#) ([fc2Image](#) \*pImage, const char \*pFilename, [fc2ImageFileFormat](#) format, void \*pOption)  
*Save the image to the specified file name with the file format specified.*
- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2ConvertImage](#) ([fc2Image](#) \*pImageIn, [fc2Image](#) \*pImageOut)
- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2ConvertImageTo](#) ([fc2PixelFormat](#) format, [fc2Image](#) \*pImageIn, [fc2Image](#) \*pImageOut)  
*Converts the current image buffer to the specified output format and stores the result in the specified image.*
- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2GetImageData](#) ([fc2Image](#) \*pImage, unsigned char \*\*ppData)  
*Get a pointer to the data associated with the image.*
- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2SetImageData](#) ([fc2Image](#) \*pImage, const unsigned char \*pData, unsigned int dataSize)  
*Set the data of the Image object.*
- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2SetImageDimensions](#) ([fc2Image](#) \*pImage, unsigned int rows, unsigned int cols, unsigned int stride, [fc2PixelFormat](#) pixelFormat, [fc2BayerTileFormat](#) bayerFormat)



*Sets the dimensions of the image object.*

- FLYCAPTURE2\_C\_API [fc2TimeStamp](#) [fc2GetImageTimeStamp](#) ([fc2Image](#) \*pImage)

*Get the timestamp data associated with the image.*

- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2CalculateImageStatistics](#) ([fc2Image](#) \*pImage, [fc2ImageStatisticsContext](#) \*pImageStatisticsContext)

*Calculate statistics associated with the image.*

- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2CreateImageStatistics](#) ([fc2ImageStatisticsContext](#) \*pImageStatisticsContext)

*Create a statistics context.*

- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2DestroyImageStatistics](#) ([fc2ImageStatisticsContext](#) imageStatisticsContext)

*Destroy a statistics context.*

- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2GetImageStatistics](#) ([fc2ImageStatisticsContext](#) imageStatisticsContext, [fc2StatisticsChannel](#) channel, unsigned int \*pRangeMin, unsigned int \*pRangeMax, unsigned int \*pPixelValueMin, unsigned int \*pPixelValueMax, unsigned int \*pNumPixelValues, float \*pPixelValueMean, int \*\*ppHistogram)

*Get all statistics for the image.*

- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2CreateAVI](#) ([fc2AVIContext](#) \*pAVIContext)

*Create a AVI context.*

- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2AVIOpen](#) ([fc2AVIContext](#) AVIContext, const char \*pFileName, [fc2AVIOption](#) \*pOption)

*Open an AVI file in preparation for writing Images to disk.*

- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2MJPGOpen](#) ([fc2AVIContext](#) AVIContext, const char \*pFileName, [fc2MJPGOption](#) \*pOption)

*Open an MJPEG file in preparation for writing Images to disk.*

- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2H264Open](#) ([fc2AVIContext](#) AVIContext, const char \*pFileName, [fc2H264Option](#) \*pOption)

*Open an H.264 file in preparation for writing Images to disk.*

- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2AVIAppend](#) ([fc2AVIContext](#) AVIContext, [fc2Image](#) \*pImage)

*Append an image to the AVI file.*

- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2AVIClose](#) ([fc2AVIContext](#) AVIContext)

*Close the AVI file.*

- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2DestroyAVI](#) ([fc2AVIContext](#) AVIContext)

*Destroy a AVI context.*

- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2GetSystemInfo](#) ([fc2SystemInfo](#) \*pSystemInfo)

*Get system information.*

- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2GetLibraryVersion](#) ([fc2Version](#) \*pVersion)

*Get library version.*

- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2LaunchBrowser](#) (const char \*pAddress)

*Launch a URL in the system default browser.*

- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2LaunchHelp](#) (const char \*pFileName)

*Open a CHM file in the system default CHM viewer.*

- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2LaunchCommand](#) (const char \*p-Command)

*Execute a command in the terminal.*

- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2LaunchCommandAsync](#) (const char \*p-Command, [fc2AsyncCommandCallback](#) pCallback, void \*pUserData)

*Execute a command in the terminal.*

- FLYCAPTURE2\_C\_API const char \* [fc2ErrorToDescription](#) ([fc2Error](#) error)

*Get a string representation of an error.*

- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2GetCycleTime](#) ([fc2Context](#) context, [fc2TimeStamp](#) \*pTimeStamp)

*Get cycle time from camera.*

#### 4.1.1 Function Documentation

##### 4.1.1.1 FLYCAPTURE2\_C\_API [fc2Error](#) [fc2AVIAppend](#) ( [fc2AVIContext](#) *AVIContext*, [fc2Image](#) \* *pImage* )

Append an image to the AVI file.

###### Parameters

<i>AVIContext</i>	The AVI context to use.
<i>pImage</i>	The image to append.

###### Returns

A [fc2Error](#) indicating the success or failure of the function.

##### 4.1.1.2 FLYCAPTURE2\_C\_API [fc2Error](#) [fc2AVIClose](#) ( [fc2AVIContext](#) *AVIContext* )

Close the AVI file.

###### Parameters

<i>AVIContext</i>	The AVI context to use.
-------------------	-------------------------

###### Returns

A [fc2Error](#) indicating the success or failure of the function.

##### 4.1.1.3 FLYCAPTURE2\_C\_API [fc2Error](#) [fc2AVIOpen](#) ( [fc2AVIContext](#) *AVIContext*, const char \* *pFileName*, [fc2AVIOption](#) \* *pOption* )

Open an AVI file in preparation for writing Images to disk.

The size of AVI files is limited to 2GB. The filenames are automatically generated using the filename specified.

**Parameters**

<i>AVIContext</i>	The AVI context to use.
<i>pFileName</i>	The filename of the AVI file.
<i>pOption</i>	Options to apply to the AVI file.

**Returns**

A `fc2Error` indicating the success or failure of the function.

**4.1.1.4 FLYCAPTURE2\_C\_API `fc2Error fc2CalculateImageStatistics ( fc2Image * pImage, fc2ImageStatisticsContext * pImageStatisticsContext )`**

Calculate statistics associated with the image.

In order to collect statistics for a particular channel, the enabled flag for the channel must be set to true. Statistics can only be collected for images in Mono8, Mono16, RGB, RGBU, BGR and BGRU.

**Parameters**

<i>pImage</i>	The <a href="#">fc2Image</a> to be used.
<i>pImage-Statistics-Context</i>	The <code>fc2ImageStatisticsContext</code> to hold the statistics.

**Returns**

A `fc2Error` indicating the success or failure of the function.

**4.1.1.5 FLYCAPTURE2\_C\_API `fc2Error fc2Connect ( fc2Context context, fc2PGRGuid * guid )`**

Connects the camera object to the camera specified by the GUID.

**Parameters**

<i>context</i>	The <code>fc2Context</code> to be used.
<i>guid</i>	The unique identifier for a specific camera on the PC.

**Returns**

A `fc2Error` indicating the success or failure of the function.

#### 4.1.1.6 FLYCAPTURE2\_C\_API fc2Error fc2ConvertImage ( fc2Image \* *plmageIn*, fc2Image \* *plmageOut* )

##### Parameters

<i>plmageIn</i>	
<i>plmageOut</i>	

##### Returns

A fc2Error indicating the success or failure of the function.

#### 4.1.1.7 FLYCAPTURE2\_C\_API fc2Error fc2ConvertImageTo ( fc2PixelFormat *format*, fc2Image \* *plmageIn*, fc2Image \* *plmageOut* )

Converts the current image buffer to the specified output format and stores the result in the specified image.

The destination image does not need to be configured in any way before the call is made.

##### Parameters

<i>format</i>	Output format of the converted image.
<i>plmageIn</i>	Input image.
<i>plmageOut</i>	Output image.

##### Returns

A fc2Error indicating the success or failure of the function.

#### 4.1.1.8 FLYCAPTURE2\_C\_API fc2Error fc2CreateAVI ( fc2AVIContext \* *pAVIContext* )

Create a AVI context.

##### Parameters

<i>pAVIContext</i>	A AVI context.
--------------------	----------------

##### Returns

A fc2Error indicating the success or failure of the function.

#### 4.1.1.9 FLYCAPTURE2\_C\_API fc2Error fc2CreateContext ( fc2Context \* *pContext* )

Create a FC2 context for IIDC camera.

This call must be made before any other calls that use a context will succeed.

## Parameters

<i>pContext</i>	A pointer to the fc2Context to be created.
-----------------	--

## Returns

A fc2Error indicating the success or failure of the function.

**4.1.1.10 FLYCAPTURE2\_C\_API fc2Error fc2CreateGigEContext ( fc2Context \* pContext )**

Create a FC2 context for a GigE Vision camera.

This call must be made before any other calls that use a context will succeed.

## Parameters

<i>pContext</i>	A pointer to the fc2Context to be created.
-----------------	--

## Returns

A fc2Error indicating the success or failure of the function.

**4.1.1.11 FLYCAPTURE2\_C\_API fc2Error fc2CreateImage ( fc2Image \* pImage )**

Create a [fc2Image](#).

If externally allocated memory is to be used for the converted image, simply assigning the pData member of the [fc2Image](#) structure is insufficient. [fc2SetImageData\(\)](#) should be called in order to populate the [fc2Image](#) structure correctly.

## Parameters

<i>pImage</i>	Pointer to image to be created.
---------------	---------------------------------

## See also

[fc2SetImageData\(\)](#)

## Returns

A fc2Error indicating the success or failure of the function.

**4.1.1.12 FLYCAPTURE2\_C\_API fc2Error fc2CreateImageStatistics ( fc2ImageStatisticsContext \* pImageStatisticsContext )**

Create a statistics context.

## Parameters

<i>pImage-Statistics-Context</i>	A statistics context.
----------------------------------	-----------------------

## Returns

A `fc2Error` indicating the success or failure of the function.

**4.1.1.13 FLYCAPTURE2\_C\_API `fc2Error` `fc2DestroyAVI` ( `fc2AVIContext` *AVIContext* )**

Destroy a AVI context.

## Parameters

<i>AVIContext</i>	A AVI context.
-------------------	----------------

## Returns

A `fc2Error` indicating the success or failure of the function.

**4.1.1.14 FLYCAPTURE2\_C\_API `fc2Error` `fc2DestroyContext` ( `fc2Context` *context* )**

Destroy the FC2 context.

This must be called when the user is finished with the context in order to prevent memory leaks.

## Parameters

<i>context</i>	The context to be destroyed.
----------------	------------------------------

## Returns

A `fc2Error` indicating the success or failure of the function.

**4.1.1.15 FLYCAPTURE2\_C\_API `fc2Error` `fc2DestroyImage` ( `fc2Image` \* *image* )**

Destroy the [fc2Image](#).

## Parameters

<i>image</i>	Pointer to image to be destroyed.
--------------	-----------------------------------

**Returns**

A `fc2Error` indicating the success or failure of the function.

**4.1.1.16 FLYCAPTURE2\_C\_API `fc2Error` `fc2DestroyImageStatistics` ( `fc2ImageStatisticsContext` *imageStatisticsContext* )**

Destroy a statistics context.

**Parameters**

<i>image-Statistics-Context</i>	A statistics context.
---------------------------------	-----------------------

**Returns**

A `fc2Error` indicating the success or failure of the function.

**4.1.1.17 FLYCAPTURE2\_C\_API `fc2Error` `fc2DetermineBitsPerPixel` ( `fc2PixelFormat` *format*, `unsigned int` \* *pBitsPerPixel* )**

Calculate the bits per pixel for the specified pixel format.

**Parameters**

<i>format</i>	The pixel format.
<i>pBitsPerPixel</i>	The bits per pixel.

**Returns**

A `fc2Error` indicating the success or failure of the function.

**4.1.1.18 FLYCAPTURE2\_C\_API `fc2Error` `fc2Disconnect` ( `fc2Context` *context* )**

Disconnects the `fc2Context` from the camera.

**Parameters**

<i>context</i>	The <code>fc2Context</code> to be used.
----------------	---

**Returns**

A `fc2Error` indicating the success or failure of the function.

#### 4.1.1.19 FLYCAPTURE2\_C\_API **fc2Error** fc2DiscoverGigECameras ( **fc2Context** *context*, **fc2CameraInfo** \* *gigECameras*, unsigned int \* *arraySize* )

Discover all cameras connected to the network even if they reside on a different subnet.

This is useful in situations where a GigE camera is using Persistent IP and the application's subnet is different from the device subnet. After discovering the camera, it is easy to use `ForceIPAddressToCamera()` to set a different IP configuration.

##### Parameters

<i>context</i>	The <b>fc2Context</b> to be used.
<i>gigE-Cameras</i>	Pointer to an array of <b>CameraInfo</b> structures.
<i>arraySize</i>	Size of the array. Number of discovered cameras is returned in the same value.

##### Returns

An **Error** indicating the success or failure of the function. If the error is **PGRERROR\_BUFFER\_TOO\_SMALL** then *arraySize* will contain the minimum size needed for *gigECameras* array.

#### 4.1.1.20 FLYCAPTURE2\_C\_API **fc2Error** fc2EnableLUT ( **fc2Context** *context*, **BOOL** *on* )

Enable or disable LUT functionality on the camera.

##### Parameters

<i>context</i>	The <b>fc2Context</b> to be used.
<i>on</i>	Whether to enable or disable LUT.

##### Returns

A **fc2Error** indicating the success or failure of the function.

#### 4.1.1.21 FLYCAPTURE2\_C\_API const char\* fc2ErrorToDescription ( **fc2Error** *error* )

Get a string representation of an error.

##### Parameters

<i>error</i>	Error to be parsed.
--------------	---------------------

##### Returns

A **fc2Error** indicating the success or failure of the function.



**4.1.1.22 FLYCAPTURE2\_C\_API fc2Error fc2FireBusReset ( fc2Context context, fc2PGRGuid \* pGuid )**

Fire a bus reset.

The actual bus reset is only fired for the specified 1394 bus, but it will effectively cause a global bus reset for the library.

**Parameters**

<i>context</i>	The fc2Context to be used.
<i>pGuid</i>	PGRGuid of the camera or the device to cause bus reset.

**Returns**

An Error indicating the success or failure of the function.

**4.1.1.23 FLYCAPTURE2\_C\_API fc2Error fc2FireSoftwareTrigger ( fc2Context context )****Parameters**

<i>context</i>	The fc2Context to be used.
----------------	----------------------------

**Returns**

A fc2Error indicating the success or failure of the function.

**4.1.1.24 FLYCAPTURE2\_C\_API fc2Error fc2FireSoftwareTriggerBroadcast ( fc2Context context )**

Fire the software trigger according to the DCAM specifications.

**Parameters**

<i>context</i>	The fc2Context to be used.
----------------	----------------------------

**Returns**

A fc2Error indicating the success or failure of the function.

**4.1.1.25 FLYCAPTURE2\_C\_API fc2Error fc2ForceAllIPAddressesAutomatically ( )**

Force all cameras on the network to be assigned sequential IP addresses on the same subnet as the network adapters that they are connected to.

This is useful in situations where a GigE Vision cameras are using Persistent IP addresses and the application's subnet is different from the devices.

**Returns**

An Error indicating the success or failure of the function.

**4.1.1.26 FLYCAPTURE2\_C\_API fc2Error fc2ForceIPAddressAutomatically ( unsigned int *serialNumber* )**

Force a cameras on the network to be assigned sequential IP addresses on the same subnet as the netowrk adapters that it is connected to.

This is useful in situations where a GigE Vision cameras is using Persistent IP addresses and the application's subnet is different from the device.

**Returns**

An Error indicating the success or failure of the function.

**4.1.1.27 FLYCAPTURE2\_C\_API fc2Error fc2ForceIPAddressToCamera ( fc2Context *context*, fc2MACAddress *macAddress*, fc2IPAddress *ipAddress*, fc2IPAddress *subnetMask*, fc2IPAddress *defaultGateway* )**

Force the camera with the specific MAC address to the specified IP address, subnet mask and default gateway.

This is useful in situations where a GigE Vision camera is using Persistent IP and the application's subnet is different from the device subnet.

**Parameters**

<i>context</i>	The fc2Context to be used.
<i>macAddress</i>	MAC address of the camera.
<i>ipAddress</i>	IP address to set on the camera.
<i>subnetMask</i>	Subnet mask to set on the camera.
<i>default-Gateway</i>	Default gateway to set on the camera.

**Returns**

An Error indicating the success or failure of the function.

**4.1.1.28 FLYCAPTURE2\_C\_API fc2Error fc2GetActiveLUTBank ( fc2Context *context*, unsigned int \* *pActiveBank* )**

Get the LUT bank that is currently being used.

For cameras with PGR LUT, the active bank is always 0.

## Parameters

<i>context</i>	The fc2Context to be used.
<i>pActiveBank</i>	The currently active bank.

## Returns

A fc2Error indicating the success or failure of the function.

#### 4.1.1.29 FLYCAPTURE2\_C\_API fc2Error fc2GetCameraFromIndex ( fc2Context *context*, unsigned int *index*, fc2PGRGuid \* *pGuid* )

Gets the PGRGuid for a camera on the PC.

It uniquely identifies the camera specified by the index and is used to identify the camera during a [fc2Connect\(\)](#) call.

## Parameters

<i>context</i>	The fc2Context to be used.
<i>index</i>	Zero based index of camera.
<i>pGuid</i>	Unique PGRGuid for the camera.

## Returns

A fc2Error indicating the success or failure of the function.

#### 4.1.1.30 FLYCAPTURE2\_C\_API fc2Error fc2GetCameraFromSerialNumber ( fc2Context *context*, unsigned int *serialNumber*, fc2PGRGuid \* *pGuid* )

Gets the PGRGuid for a camera on the PC.

It uniquely identifies the camera specified by the serial number and is used to identify the camera during a [fc2Connect\(\)](#) call.

## Parameters

<i>context</i>	The fc2Context to be used.
<i>serial-Number</i>	Serial number of camera.
<i>pGuid</i>	Unique PGRGuid for the camera.

## Returns

A fc2Error indicating the success or failure of the function.

**4.1.1.31 FLYCAPTURE2\_C\_API fc2Error fc2GetCameraInfo ( fc2Context *context*,  
fc2CameraInfo \* *pCameraInfo* )**

Retrieves information from the camera such as serial number, model name and other camera information.

**Parameters**

<i>context</i>	The fc2Context to be used.
<i>pCameraInfo</i>	Pointer to the camera information structure to be filled.

**Returns**

A fc2Error indicating the success or failure of the function.

**4.1.1.32 FLYCAPTURE2\_C\_API fc2Error fc2GetCameraSerialNumberFromIndex ( fc2Context  
*context*, unsigned int *index*, unsigned int \* *pSerialNumber* )**

Gets the serial number of the camera with the specified index.

**Parameters**

<i>context</i>	The fc2Context to be used.
<i>index</i>	Zero based index of desired camera.
<i>pSerial- Number</i>	Serial number of camera.

**Returns**

A fc2Error indicating the success or failure of the function.

**4.1.1.33 FLYCAPTURE2\_C\_API fc2Error fc2GetConfiguration ( fc2Context *context*,  
fc2Config \* *config* )**

Get the configuration associated with the camera.

**Parameters**

<i>context</i>	The fc2Context to be used.
<i>config</i>	Pointer to the configuration structure to be filled.

**Returns**

A fc2Error indicating the success or failure of the function.

**4.1.1.34 FLYCAPTURE2\_C\_API fc2Error fc2GetCycleTime ( fc2Context context, fc2TimeStamp \* pTimeStamp )**

Get cycle time from camera.

**Parameters**

<i>TimeStamp</i>	struct.
------------------	---------

**Returns**

A fc2Error indicating the success or failure of the function.

**4.1.1.35 FLYCAPTURE2\_C\_API fc2Error fc2GetDefaultColorProcessing ( fc2ColorProcessingAlgorithm \* pDefaultMethod )**

Get the default color processing algorithm.

**Parameters**

<i>pDefault-Method</i>	The default color processing algorithm.
------------------------	---

**Returns**

A fc2Error indicating the success or failure of the function.

**4.1.1.36 FLYCAPTURE2\_C\_API fc2Error fc2GetDefaultOutputFormat ( fc2PixelFormat \* pFormat )**

Get the default output pixel format.

**Parameters**

<i>pFormat</i>	The default pixel format.
----------------	---------------------------

**Returns**

A fc2Error indicating the success or failure of the function.

**4.1.1.37 FLYCAPTURE2\_C\_API fc2Error fc2GetDeviceFromIndex ( fc2Context context, unsigned int index, fc2PGRGuid \* pGuid )**

Gets the PGRGuid for a device.

It uniquely identifies the device specified by the index.

## Parameters

<i>context</i>	The fc2Context to be used.
<i>index</i>	Zero based index of device.
<i>pGuid</i>	Unique PGRGuid for the device.

## See also

[fc2GetNumOfDevices\(\)](#)

## Returns

An Error indicating the success or failure of the function.

#### 4.1.1.38 FLYCAPTURE2\_C\_API fc2Error fc2GetEmbeddedImageInfo ( fc2Context *context*, fc2EmbeddedImageInfo \* *pInfo* )

Get the current status of the embedded image information register, as well as the availability of each embedded property.

## Parameters

<i>context</i>	The fc2Context to be used.
<i>pInfo</i>	Structure to be filled.

## Returns

A fc2Error indicating the success or failure of the function.

#### 4.1.1.39 FLYCAPTURE2\_C\_API fc2Error fc2GetFormat7Configuration ( fc2Context *context*, fc2Format7ImageSettings \* *imageSettings*, unsigned int \* *packetSize*, float \* *percentage* )

Get the current Format7 configuration from the camera.

This call will only succeed if the camera is already in Format7.

## Parameters

<i>context</i>	The fc2Context to be used.
<i>image-Settings</i>	Current image settings.
<i>packetSize</i>	Current packet size.
<i>percentage</i>	Current packet size as a percentage.

## Returns

A `fc2Error` indicating the success or failure of the function.

**4.1.1.40 FLYCAPTURE2\_C\_API `fc2Error` `fc2GetFormat7Info` ( `fc2Context` *context*, `fc2Format7Info` \* *info*, `BOOL` \* *pSupported* )**

Retrieve the availability of Format7 custom image mode and the camera capabilities for the specified Format7 mode.

The mode must be specified in the `Format7Info` structure in order for the function to succeed.

## Parameters

<i>context</i>	The <code>fc2Context</code> to be used.
<i>info</i>	Structure to be filled with the capabilities of the specified mode and the current state in the specified mode.
<i>pSupported</i>	Whether the specified mode is supported.

## Returns

A `fc2Error` indicating the success or failure of the function.

**4.1.1.41 FLYCAPTURE2\_C\_API `fc2Error` `fc2GetGigEConfig` ( `fc2Context` *context*, `fc2GigEConfig` \* *pConfig* )**

**4.1.1.42 FLYCAPTURE2\_C\_API `fc2Error` `fc2GetGigElmageBinningSettings` ( `fc2Context` *context*, unsigned int \* *horzBinnningValue*, unsigned int \* *vertBinnningValue* )**

**4.1.1.43 FLYCAPTURE2\_C\_API `fc2Error` `fc2GetGigElmageSettings` ( `fc2Context` *context*, `fc2GigElmageSettings` \* *pImageSettings* )**

**4.1.1.44 FLYCAPTURE2\_C\_API `fc2Error` `fc2GetGigElmageSettingsInfo` ( `fc2Context` *context*, `fc2GigElmageSettingsInfo` \* *pInfo* )**

**4.1.1.45 FLYCAPTURE2\_C\_API `fc2Error` `fc2GetGigElmagingMode` ( `fc2Context` *context*, `fc2Mode` \* *mode* )**

**4.1.1.46 FLYCAPTURE2\_C\_API `fc2Error` `fc2GetGigEProperty` ( `fc2Context` *context*, `fc2GigEProperty` \* *pGigEProp* )**

Get the specified `GigEProperty`.

The `GigEPropertyType` field must be set in order for this function to succeed.

## Parameters

<i>context</i>	The <code>fc2Context</code> to be used.
<i>pGigEProp</i>	The <code>GigE</code> property to get.

**Returns**

An Error indicating the success or failure of the function.

4.1.1.47 FLYCAPTURE2\_C\_API **fc2Error** **fc2GetGigEStreamChannelInfo** ( **fc2Context** *context*,  
unsigned int *channel*, **fc2GigEStreamChannel** \* *pChannel* )

4.1.1.48 FLYCAPTURE2\_C\_API **fc2Error** **fc2GetGPIOPinDirection** ( **fc2Context** *context*,  
unsigned int *pin*, unsigned int \* *pDirection* )

Get the GPIO pin direction for the specified pin.

This is not a required call when using the trigger or strobe functions as the pin direction is set automatically internally.

**Parameters**

<i>context</i>	The <b>fc2Context</b> to be used.
<i>pin</i>	Pin to get the direction for.
<i>pDirection</i>	Direction of the pin. 0 for input, 1 for output.

**Returns**

A **fc2Error** indicating the success or failure of the function.

4.1.1.49 FLYCAPTURE2\_C\_API **fc2Error** **fc2GetImageData** ( **fc2Image** \* *pImage*, unsigned  
char \*\* *ppData* )

Get a pointer to the data associated with the image.

This function is considered unsafe. The pointer returned could be invalidated if the buffer is resized or released. The pointer may also be invalidated if the Image object is passed to [fc2RetrieveBuffer\(\)](#).

**Parameters**

<i>pImage</i>	The <a href="#">fc2Image</a> to be used.
<i>ppData</i>	A pointer to the image data.



## Returns

A `fc2Error` indicating the success or failure of the function.

**4.1.1.50 FLYCAPTURE2\_C\_API `fc2Error` `fc2GetImageStatistics` ( `fc2ImageStatisticsContext` *imageStatisticsContext*, `fc2StatisticsChannel` *channel*, unsigned int \* *pRangeMin*, unsigned int \* *pRangeMax*, unsigned int \* *pPixelValueMin*, unsigned int \* *pPixelValueMax*, unsigned int \* *pNumPixelValues*, float \* *pPixelValueMean*, int \*\* *ppHistogram* )**

Get all statistics for the image.

## Parameters

<i>imageStatisticsContext</i>	The statistics context.
<i>channel</i>	The statistics channel.
<i>pRangeMin</i>	The minimum possible value.
<i>pRangeMax</i>	The maximum possible value.
<i>pPixelValueMin</i>	The minimum pixel value.
<i>pPixelValueMax</i>	The maximum pixel value.
<i>pNumPixelValues</i>	The number of unique pixel values.
<i>pPixelValueMean</i>	The mean of the image.
<i>ppHistogram</i>	Pointer to an array containing the histogram.

## Returns

A `fc2Error` indicating the success or failure of the function.

**4.1.1.51 FLYCAPTURE2\_C\_API `fc2TimeStamp` `fc2GetImageTimeStamp` ( `fc2Image` \* *pImage* )**

Get the timestamp data associated with the image.

## Parameters

<i>pImage</i>	The <a href="#">fc2Image</a> to be used.
---------------	--

## Returns

Timestamp data associated with the image.

#### 4.1.1.52 FLYCAPTURE2\_C\_API fc2Error fc2GetInterfaceTypeFromGuid ( fc2Context *context*, fc2PGRGuid \* *pGuid*, fc2InterfaceType \* *pInterfaceType* )

Gets the interface type associated with a PGRGuid.

This is useful in situations where there is a need to enumerate all cameras for a particular interface.

##### Parameters

<i>context</i>	The fc2Context to be used.
<i>pGuid</i>	The PGRGuid to get the interface for.
<i>pInterface-Type</i>	The interface type of the PGRGuid.

##### Returns

#### 4.1.1.53 FLYCAPTURE2\_C\_API fc2Error fc2GetLibraryVersion ( fc2Version \* *pVersion* )

Get library version.

##### Parameters

<i>pVersion</i>	Structure to receive the library version.
-----------------	---

##### Returns

A fc2Error indicating the success or failure of the function.

#### 4.1.1.54 FLYCAPTURE2\_C\_API fc2Error fc2GetLUTBankInfo ( fc2Context *context*, unsigned int *bank*, BOOL \* *pReadSupported*, BOOL \* *pWriteSupported* )

Query the read/write status of a single LUT bank.

##### Parameters

<i>context</i>	The fc2Context to be used.
<i>bank</i>	The bank to query.
<i>pRead-Supported</i>	Whether reading from the bank is supported.
<i>pWrite-Supported</i>	Whether writing to the bank is supported.

**Returns**

A `fc2Error` indicating the success or failure of the function.

**4.1.1.55 FLYCAPTURE2.C\_API `fc2Error` `fc2GetLUTChannel` ( `fc2Context` *context*, unsigned int *bank*, unsigned int *channel*, unsigned int *sizeEntries*, unsigned int \* *pEntries* )**

Get the LUT channel settings from the camera.

**Parameters**

<i>context</i>	The <code>fc2Context</code> to be used.
<i>bank</i>	Bank to retrieve.
<i>channel</i>	Channel to retrieve.
<i>sizeEntries</i>	Number of entries in LUT table to read.
<i>pEntries</i>	Array to store LUT entries.

**Returns**

A `fc2Error` indicating the success or failure of the function.

**4.1.1.56 FLYCAPTURE2.C\_API `fc2Error` `fc2GetLUTInfo` ( `fc2Context` *context*, `fc2LUTData` \* *pData* )**

Query if LUT support is available on the camera.

Note that some cameras may report support for the LUT and return an `inputBitDepth` of 0. In these cases use `log2(numEntries)` for the `inputBitDepth`.

**Parameters**

<i>context</i>	The <code>fc2Context</code> to be used.
<i>pData</i>	The LUT structure to be filled.

**Returns**

A `fc2Error` indicating the success or failure of the function.

**4.1.1.57 FLYCAPTURE2.C\_API `fc2Error` `fc2GetMemoryChannel` ( `fc2Context` *context*, unsigned int \* *pCurrentChannel* )**

Retrieve the current memory channel from the camera.

**Parameters**

<i>context</i>	The <code>fc2Context</code> to be used.
<i>pCurrent-Channel</i>	Current memory channel.

**Returns**

A `fc2Error` indicating the success or failure of the function.

**4.1.1.58 FLYCAPTURE2\_C\_API `fc2Error` `fc2GetMemoryChannelInfo` ( `fc2Context` *context*,  
unsigned int \* *pNumChannels* )**

Query the camera for memory channel support.

If the number of channels is 0, then memory channel support is not available.

**Parameters**

<i>context</i>	The <code>fc2Context</code> to be used.
<i>pNum-Channels</i>	Number of memory channels supported.

**Returns**

A `fc2Error` indicating the success or failure of the function.

**4.1.1.59 FLYCAPTURE2\_C\_API `fc2Error` `fc2GetNumOfCameras` ( `fc2Context` *context*,  
unsigned int \* *pNumCameras* )**

Gets the number of cameras attached to the PC.

**Parameters**

<i>context</i>	The <code>fc2Context</code> to be used.
<i>pNum-Cameras</i>	Number of cameras detected.

**Returns**

A `fc2Error` indicating the success or failure of the function.

**4.1.1.60 FLYCAPTURE2\_C\_API `fc2Error` `fc2GetNumOfDevices` ( `fc2Context` *context*,  
unsigned int \* *pNumDevices* )**

Gets the number of devices.

This may include hubs, host controllers and other hardware devices (including cameras).

**Parameters**

<i>context</i>	The <code>fc2Context</code> to be used.
<i>pNum-Devices</i>	The number of devices found.

**Returns**

An Error indicating the success or failure of the function.

**4.1.1.61 FLYCAPTURE2\_C\_API fc2Error fc2GetNumStreamChannels ( fc2Context *context*, unsigned int \* *numChannels* )**

**4.1.1.62 FLYCAPTURE2\_C\_API fc2Error fc2GetProperty ( fc2Context *context*, fc2Property \* *prop* )**

Reads the settings for the specified property from the camera.

The property type must be specified in the fc2Property structure passed into the function in order for the function to succeed. If auto is on, the integer and abs values returned may not be consistent with each other.

**Parameters**

<i>context</i>	The fc2Context to be used.
<i>prop</i>	Pointer to the Property structure to be filled.

**Returns**

A fc2Error indicating the success or failure of the function.

**4.1.1.63 FLYCAPTURE2\_C\_API fc2Error fc2GetPropertyInfo ( fc2Context *context*, fc2PropertyInfo \* *propInfo* )**

Retrieves information about the specified camera property.

The property type must be specified in the fc2PropertyInfo structure passed into the function in order for the function to succeed.

**Parameters**

<i>context</i>	The fc2Context to be used.
<i>propInfo</i>	Pointer to the PropertyInfo structure to be filled.

**Returns**

A fc2Error indicating the success or failure of the function.

**4.1.1.64 FLYCAPTURE2\_C\_API const char\* fc2GetRegisterString ( unsigned int *registerVal* )**

Returns a text representation of the register value.

## Parameters

<i>registerVal</i>	The register value to query.
--------------------	------------------------------

## Returns

A `fc2Error` indicating the success or failure of the function.

#### 4.1.1.65 FLYCAPTURE2\_C\_API `fc2Error` `fc2GetStrobe` ( `fc2Context` *context*, `fc2StrobeControl` \* *strobeControl* )

Retrieve current strobe settings from the camera.

The strobe pin must be specified in the structure before being passed in to the function.

## Parameters

<i>context</i>	The <code>fc2Context</code> to be used.
<i>strobe-Control</i>	Structure to receive strobe settings.

## Returns

A `fc2Error` indicating the success or failure of the function.

#### 4.1.1.66 FLYCAPTURE2\_C\_API `fc2Error` `fc2GetStrobeInfo` ( `fc2Context` *context*, `fc2StrobeInfo` \* *strobeInfo* )

Retrieve strobe information from the camera.

## Parameters

<i>context</i>	The <code>fc2Context</code> to be used.
<i>strobeInfo</i>	Structure to receive strobe information.

## Returns

A `fc2Error` indicating the success or failure of the function.

#### 4.1.1.67 FLYCAPTURE2\_C\_API `fc2Error` `fc2GetSystemInfo` ( `fc2SystemInfo` \* *pSystemInfo* )

Get system information.

## Parameters

<i>pSystemInfo</i>	Structure to receive system information.
--------------------	--

**Returns**

A `fc2Error` indicating the success or failure of the function.

**4.1.1.68 FLYCAPTURE2\_C\_API `fc2Error` `fc2GetTriggerDelay` ( `fc2Context` *context*,  
`fc2TriggerDelay` \* *triggerDelay* )**

Retrieve current trigger delay settings from the camera.

**Parameters**

<i>context</i>	The <code>fc2Context</code> to be used.
<i>triggerDelay</i>	Structure to receive trigger delay settings.

**Returns**

A `fc2Error` indicating the success or failure of the function.

**4.1.1.69 FLYCAPTURE2\_C\_API `fc2Error` `fc2GetTriggerDelayInfo` ( `fc2Context` *context*,  
`fc2TriggerDelayInfo` \* *triggerDelayInfo* )**

Retrieve trigger delay information from the camera.

**Parameters**

<i>context</i>	The <code>fc2Context</code> to be used.
<i>triggerDelay-Info</i>	Structure to receive trigger delay information.

**Returns**

A `fc2Error` indicating the success or failure of the function.

**4.1.1.70 FLYCAPTURE2\_C\_API `fc2Error` `fc2GetTriggerMode` ( `fc2Context` *context*,  
`fc2TriggerMode` \* *triggerMode* )**

Retrieve current trigger settings from the camera.

**Parameters**

<i>context</i>	The <code>fc2Context</code> to be used.
<i>triggerMode</i>	Structure to receive trigger mode settings.

**Returns**

A `fc2Error` indicating the success or failure of the function.

#### 4.1.1.71 FLYCAPTURE2\_C\_API **fc2Error** fc2GetTriggerModelInfo ( **fc2Context** *context*, **fc2TriggerModelInfo** \* *triggerModelInfo* )

Retrieve trigger information from the camera.

##### Parameters

<i>context</i>	The fc2Context to be used.
<i>triggerModelInfo</i>	Structure to receive trigger information.

##### Returns

A fc2Error indicating the success or failure of the function.

#### 4.1.1.72 FLYCAPTURE2\_C\_API **fc2Error** fc2GetVideoModeAndFrameRate ( **fc2Context** *context*, **fc2VideoMode** \* *videoMode*, **fc2FrameRate** \* *frameRate* )

Get the current video mode and frame rate from the camera.

If the camera is in Format7, the video mode will be VIDEOMODE\_FORMAT7 and the frame rate will be FRAMERATE\_FORMAT7.

##### Parameters

<i>context</i>	The fc2Context to be used.
<i>videoMode</i>	Current video mode.
<i>frameRate</i>	Current frame rate.

##### Returns

A fc2Error indicating the success or failure of the function.

#### 4.1.1.73 FLYCAPTURE2\_C\_API **fc2Error** fc2GetVideoModeAndFrameRateInfo ( **fc2Context** *context*, **fc2VideoMode** *videoMode*, **fc2FrameRate** *frameRate*, **BOOL** \* *pSupported* )

Query the camera to determine if the specified video mode and frame rate is supported.

##### Parameters

<i>context</i>	The fc2Context to be used.
<i>videoMode</i>	Video mode to check.
<i>frameRate</i>	Frame rate to check.
<i>pSupported</i>	Whether the video mode and frame rate is supported.



**Returns**

A `fc2Error` indicating the success or failure of the function.

**4.1.1.74 FLYCAPTURE2\_C\_API `fc2Error` `fc2H264Open` ( `fc2AVIContext` *AVIContext*, `const char *` *pFileName*, `fc2H264Option *` *pOption* )**

Open an H.264 file in preparation for writing Images to disk.

The size of AVI files is limited to 2GB. The filenames are automatically generated using the filename specified.

**Parameters**

<i>AVIContext</i>	The AVI context to use.
<i>pFileName</i>	The filename of the AVI file.
<i>pOption</i>	Options to apply to the AVI file.

**Returns**

A `fc2Error` indicating the success or failure of the function.

**4.1.1.75 FLYCAPTURE2\_C\_API `fc2Error` `fc2IsCameraControlable` ( `fc2Context` *context*, `fc2PGRGuid *` *pGuid*, `BOOL *` *pControlable* )**

Query whether a GigE camera is controlable.

**Parameters**

<i>context</i>	The <code>fc2Context</code> to be used.
<i>pGuid</i>	Unique PGRGuid for the camera.
<i>pControlable</i>	True indicates camera is controllable

**Returns**

A `fc2Error` indicating the success or failure of the function.

**4.1.1.76 FLYCAPTURE2\_C\_API `fc2Error` `fc2LaunchBrowser` ( `const char *` *pAddress* )**

Launch a URL in the system default browser.

**Parameters**

<i>pAddress</i>	URL to open in browser.
-----------------	-------------------------

**Returns**

A `fc2Error` indicating the success or failure of the function.

**4.1.1.77 FLYCAPTURE2\_C\_API `fc2Error` `fc2LaunchCommand` ( `const char *` *pCommand* )**

Execute a command in the terminal.

This is a blocking call that will return when the command completes.

**Parameters**

<i>pCommand</i>	Command to execute.
-----------------	---------------------

**Returns**

A `fc2Error` indicating the success or failure of the function.

**4.1.1.78 FLYCAPTURE2\_C\_API `fc2Error` `fc2LaunchCommandAsync` ( `const char *` *pCommand*, `fc2AsyncCommandCallback` *pCallback*, `void *` *pUserData* )**

Execute a command in the terminal.

This is a non-blocking call that will return immediately. The return value of the command can be retrieved in the callback.

**Parameters**

<i>pCommand</i>	Command to execute.
<i>pCallback</i>	Callback to fire when command is complete.
<i>pUserData</i>	Data pointer to pass to callback.

**Returns**

A `fc2Error` indicating the success or failure of the function.

**4.1.1.79 FLYCAPTURE2\_C\_API `fc2Error` `fc2LaunchHelp` ( `const char *` *pFileName* )**

Open a CHM file in the system default CHM viewer.

**Parameters**

<i>pFileName</i>	Filename of CHM file to open.
------------------	-------------------------------

**Returns**

A `fc2Error` indicating the success or failure of the function.

**4.1.1.80 FLYCAPTURE2\_C\_API fc2Error fc2MJPEGOpen ( fc2AVIContext *AVIContext*, const char \* *pFileName*, fc2MJPEGOption \* *pOption* )**

Open an MJPEG file in preparation for writing Images to disk.

The size of AVI files is limited to 2GB. The filenames are automatically generated using the filename specified.

#### Parameters

<i>AVIContext</i>	The AVI context to use.
<i>pFileName</i>	The filename of the AVI file.
<i>pOption</i>	Options to apply to the AVI file.

#### Returns

A fc2Error indicating the success or failure of the function.

**4.1.1.81 FLYCAPTURE2\_C\_API fc2Error fc2QueryGigElmagingMode ( fc2Context *context*, fc2Mode *mode*, BOOL \* *isSupported* )**

**4.1.1.82 FLYCAPTURE2\_C\_API fc2Error fc2ReadGVCPMemory ( fc2Context *context*, unsigned int *address*, unsigned char \* *pBuffer*, unsigned int *length* )**

Read a GVCP memory block.

#### Parameters

<i>context</i>	The fc2Context to be used.
<i>address</i>	GVCP address to be read from.
<i>pBuffer</i>	Array containing data to be written.
<i>length</i>	Size of array, in quadlets.

#### Returns

An Error indicating the success or failure of the function.

**4.1.1.83 FLYCAPTURE2\_C\_API fc2Error fc2ReadGVCPRegister ( fc2Context *context*, unsigned int *address*, unsigned int \* *pValue* )**

Read a GVCP register.

#### Parameters

<i>context</i>	The fc2Context to be used.
<i>address</i>	GVCP address to be read from.
<i>pValue</i>	The value that is read.

**Returns**

An Error indicating the success or failure of the function.

**4.1.1.84 FLYCAPTURE2\_C.API fc2Error fc2ReadGVCPRegisterBlock ( fc2Context context, unsigned int address, unsigned int \* pBuffer, unsigned int length )**

Read a GVCP register block.

**Parameters**

<i>context</i>	The fc2Context to be used.
<i>address</i>	GVCP address to be read from.
<i>pBuffer</i>	Array containing data to be written.
<i>length</i>	Size of array, in quadlets.

**Returns**

An Error indicating the success or failure of the function.

**4.1.1.85 FLYCAPTURE2\_C.API fc2Error fc2ReadRegister ( fc2Context context, unsigned int address, unsigned int \* pValue )**

Read the specified register from the camera.

**Parameters**

<i>context</i>	The fc2Context to be used.
<i>address</i>	DCAM address to be read from.
<i>pValue</i>	The value that is read.

**Returns**

A fc2Error indicating the success or failure of the function.

**4.1.1.86 FLYCAPTURE2\_C.API fc2Error fc2ReadRegisterBlock ( fc2Context context, unsigned short addressHigh, unsigned int addressLow, unsigned int \* pBuffer, unsigned int length )**

Write to the specified register block on the camera.

**Parameters**

<i>context</i>	The fc2Context to be used.
<i>addressHigh</i>	Top 16 bits of the 48 bit absolute address to read from.
<i>addressLow</i>	Bottom 32 bits of the 48 bits absolute address to read from.
<i>pBuffer</i>	Array to store read data.
<i>length</i>	Size of array, in quadlets.

**Returns**

A `fc2Error` indicating the success or failure of the function.

**4.1.1.87 FLYCAPTURE2.C\_API `fc2Error` `fc2RegisterCallback` ( `fc2Context` *context*, `fc2BusEventCallback` *enumCallback*, `fc2BusCallbackType` *callbackType*, void \* *pParameter*, `fc2CallbackHandle` \* *pCallbackHandle* )**

Register a callback function that will be called when the specified callback event occurs.

**Parameters**

<i>context</i>	The <code>fc2Context</code> to be used.
<i>enum-Callback</i>	Pointer to function that will receive the callback.
<i>callbackType</i>	Type of callback to register for.
<i>pParameter</i>	Callback parameter to be passed to callback.
<i>pCallback-Handle</i>	Unique callback handle used for unregistering callback.

**Returns**

A `fc2Error` indicating the success or failure of the function.

**4.1.1.88 FLYCAPTURE2.C\_API `fc2Error` `fc2RescanBus` ( `fc2Context` *context* )**

Force a rescan of the buses.

This does not trigger a bus reset. However, any current connections to a Camera object will be invalidated.

**Returns**

An Error indicating the success or failure of the function.

**4.1.1.89 FLYCAPTURE2.C\_API `fc2Error` `fc2RestoreFromMemoryChannel` ( `fc2Context` *context*, unsigned int *channel* )**

Restore the specified current memory channel.

**Parameters**

<i>context</i>	The <code>fc2Context</code> to be used.
<i>channel</i>	Memory channel to restore from.

**Returns**

A `fc2Error` indicating the success or failure of the function.

#### 4.1.1.90 FLYCAPTURE2\_C API `fc2Error fc2RetrieveBuffer ( fc2Context context, fc2Image * pImage )`

Retrieves the the next image object containing the next image.

**Parameters**

<i>context</i>	The <code>fc2Context</code> to be used.
<i>pImage</i>	Pointer to <a href="#">fc2Image</a> to store image data.

**Returns**

A `fc2Error` indicating the success or failure of the function.

#### 4.1.1.91 FLYCAPTURE2\_C API `fc2Error fc2SaveImage ( fc2Image * pImage, const char * pFilename, fc2ImageFileFormat format )`

Save the image to the specified file name with the file format specified.

**Parameters**

<i>pImage</i>	The <a href="#">fc2Image</a> to be used.
<i>pFilename</i>	Filename to save image with.
<i>format</i>	File format to save in.

**Returns**

A `fc2Error` indicating the success or failure of the function.

#### 4.1.1.92 FLYCAPTURE2\_C API `fc2Error fc2SaveImageWithOptions ( fc2Image * pImage, const char * pFilename, fc2ImageFileFormat format, void * pOption )`

Save the image to the specified file name with the file format specified.

**Parameters**

<i>pImage</i>	The <a href="#">fc2Image</a> to be used.
<i>pFilename</i>	Filename to save image with.
<i>format</i>	File format to save in.
<i>pOption</i>	Options for saving image.

**Returns**

A `fc2Error` indicating the success or failure of the function.

**4.1.1.93 FLYCAPTURE2\_C\_API `fc2Error` `fc2SaveToMemoryChannel` ( `fc2Context` *context*,  
unsigned int *channel* )**

Save the current settings to the specified current memory channel.

**Parameters**

<i>context</i>	The <code>fc2Context</code> to be used.
<i>channel</i>	Memory channel to save to.

**Returns**

A `fc2Error` indicating the success or failure of the function.

**4.1.1.94 FLYCAPTURE2\_C\_API `fc2Error` `fc2SetActiveLUTBank` ( `fc2Context` *context*,  
unsigned int *activeBank* )**

Set the LUT bank that will be used.

**Parameters**

<i>context</i>	The <code>fc2Context</code> to be used.
<i>activeBank</i>	The bank to be set as active.

**Returns**

A `fc2Error` indicating the success or failure of the function.

**4.1.1.95 FLYCAPTURE2\_C\_API `fc2Error` `fc2SetCallback` ( `fc2Context` *context*,  
`fc2ImageEventCallback` *pCallbackFn*, void \* *pCallbackData* )**

Sets the callback data to be used on completion of image transfer.

To clear the current stored callback data, pass in NULL for both callback arguments.

**Parameters**

<i>context</i>	The <code>fc2Context</code> to be used.
<i>pCallbackFn</i>	A function to be called when a new image is received.
<i>pCallbackData</i>	A pointer to data that can be passed to the callback function.

**Returns**

A `fc2Error` indicating the success or failure of the function.

**4.1.1.96 FLYCAPTURE2\_C API `fc2Error fc2SetConfiguration ( fc2Context context, fc2Config * config )`**

Set the configuration associated with the camera.

**Parameters**

<i>context</i>	The <code>fc2Context</code> to be used.
<i>config</i>	Pointer to the configuration structure to be used.

**Returns**

A `fc2Error` indicating the success or failure of the function.

**4.1.1.97 FLYCAPTURE2\_C API `fc2Error fc2SetDefaultColorProcessing ( fc2ColorProcessingAlgorithm defaultMethod )`**

Set the default color processing algorithm.

This method will be used for any image with the DEFAULT algorithm set. The method used is determined at the time of the `Convert()` call, therefore the most recent execution of this function will take precedence. The default setting is shared within the current process.

**Parameters**

<i>default-Method</i>	The color processing algorithm to set.
-----------------------	--

**Returns**

A `fc2Error` indicating the success or failure of the function.

**4.1.1.98 FLYCAPTURE2\_C API `fc2Error fc2SetDefaultOutputFormat ( fc2PixelFormat format )`**

Set the default output pixel format.

This format will be used for any call to `Convert()` that does not specify an output format. The format used will be determined at the time of the `Convert()` call, therefore the most recent execution of this function will take precedence. The default is shared within the current process.



## Parameters

<i>format</i>	The output pixel format to set.
---------------	---------------------------------

## Returns

A `fc2Error` indicating the success or failure of the function.

**4.1.1.99 FLYCAPTURE2\_C\_API `fc2Error` `fc2SetEmbeddedImageInfo` ( `fc2Context` *context*, `fc2EmbeddedImageInfo` \* *pInfo* )**

Sets the on/off values of the embedded image information structure to the camera.

## Parameters

<i>context</i>	The <code>fc2Context</code> to be used.
<i>pInfo</i>	Structure to be used.

## Returns

A `fc2Error` indicating the success or failure of the function.

**4.1.1.100 FLYCAPTURE2\_C\_API `fc2Error` `fc2SetFormat7Configuration` ( `fc2Context` *context*, `fc2Format7ImageSettings` \* *imageSettings*, float *percentSpeed* )**

Set the current Format7 configuration to the camera.

## Parameters

<i>context</i>	The <code>fc2Context</code> to be used.
<i>image-Settings</i>	Image settings to be written to the camera.
<i>percent-Speed</i>	Packet size as a percentage to be written to the camera.

## Returns

A `fc2Error` indicating the success or failure of the function.

**4.1.1.101 FLYCAPTURE2\_C\_API `fc2Error` `fc2SetFormat7ConfigurationPacket` ( `fc2Context` *context*, `fc2Format7ImageSettings` \* *imageSettings*, unsigned int *packetSize* )**

Set the current Format7 configuration to the camera.

## Parameters

<i>context</i>	The fc2Context to be used.
<i>image-Settings</i>	Image settings to be written to the camera.
<i>packetSize</i>	Packet size to be written to the camera.

## Returns

A fc2Error indicating the success or failure of the function.

- 4.1.1.102 FLYCAPTURE2\_C\_API fc2Error fc2SetGigEConfig ( fc2Context *context*, const fc2GigEConfig \* *pConfig* )
- 4.1.1.103 FLYCAPTURE2\_C\_API fc2Error fc2SetGigEImageBinningSettings ( fc2Context *context*, unsigned int *horzBinningValue*, unsigned int *vertBinningValue* )
- 4.1.1.104 FLYCAPTURE2\_C\_API fc2Error fc2SetGigEImageSettings ( fc2Context *context*, const fc2GigEImageSettings \* *pImageSettings* )
- 4.1.1.105 FLYCAPTURE2\_C\_API fc2Error fc2SetGigEImagingMode ( fc2Context *context*, fc2Mode *mode* )
- 4.1.1.106 FLYCAPTURE2\_C\_API fc2Error fc2SetGigEProperty ( fc2Context *context*, const fc2GigEProperty \* *pGigEProp* )

Set the specified GigEProperty.

The GigEPropertyType field must be set in order for this function to succeed.

## Parameters

<i>context</i>	The fc2Context to be used.
<i>pGigEProp</i>	The GigE property to set.

## Returns

An Error indicating the success or failure of the function.

- 4.1.1.107 FLYCAPTURE2\_C\_API fc2Error fc2SetGigEStreamChannelInfo ( fc2Context *context*, unsigned int *channel*, fc2GigEStreamChannel \* *pChannel* )
- 4.1.1.108 FLYCAPTURE2\_C\_API fc2Error fc2SetGPIOPinDirection ( fc2Context *context*, unsigned int *pin*, unsigned int *direction* )

Set the GPIO pin direction for the specified pin.

This is useful if there is a need to set the pin into an input pin (i.e. to read the voltage)

off the pin without setting it as a trigger source. This is not a required call when using the trigger or strobe functions as the pin direction is set automatically internally.

**Parameters**

<i>context</i>	The fc2Context to be used.
<i>pin</i>	Pin to get the direction for.
<i>direction</i>	Direction of the pin. 0 for input, 1 for output.

**Returns**

A fc2Error indicating the success or failure of the function.

**4.1.1.109 FLYCAPTURE2\_C\_API fc2Error fc2SetGPIOPinDirectionBroadcast ( fc2Context context, unsigned int pin, unsigned int direction )**

Set the GPIO pin direction for the specified pin.

This is useful if there is a need to set the pin into an input pin (i.e. to read the voltage) off the pin without setting it as a trigger source. This is not a required call when using the trigger or strobe functions as the pin direction is set automatically internally.

**Parameters**

<i>context</i>	The fc2Context to be used.
<i>pin</i>	Pin to get the direction for.
<i>direction</i>	Direction of the pin. 0 for input, 1 for output.

**Returns**

A fc2Error indicating the success or failure of the function.

**4.1.1.110 FLYCAPTURE2\_C\_API fc2Error fc2SetImageData ( fc2Image \* pImage, const unsigned char \* pData, unsigned int dataSize )**

Set the data of the Image object.

Ownership of the image buffer is not transferred to the Image object. It is the user's responsibility to delete the buffer when it is no longer in use.

**Parameters**

<i>pImage</i>	The <a href="#">fc2Image</a> to be used.
<i>pData</i>	Pointer to the image buffer.
<i>dataSize</i>	Size of the image buffer.

**Returns**

A `fc2Error` indicating the success or failure of the function.

**4.1.1.111 FLYCAPTURE2\_C API `fc2Error fc2SetImageDimensions ( fc2Image * plmage, unsigned int rows, unsigned int cols, unsigned int stride, fc2PixelFormat pixelFormat, fc2BayerTileFormat bayerFormat )`**

Sets the dimensions of the image object.

**Parameters**

<i>plmage</i>	The <code>fc2Image</code> to be used.
<i>rows</i>	Number of rows to set.
<i>cols</i>	Number of cols to set.
<i>stride</i>	Stride to set.
<i>pixelFormat</i>	Pixel format to set.
<i>bayerFormat</i>	Bayer tile format to set.

**Returns**

A `fc2Error` indicating the success or failure of the function.

**4.1.1.112 FLYCAPTURE2\_C API `fc2Error fc2SetLUTChannel ( fc2Context context, unsigned int bank, unsigned int channel, unsigned int sizeEntries, unsigned int * pEntries )`**

Set the LUT channel settings to the camera.

**Parameters**

<i>context</i>	The <code>fc2Context</code> to be used.
<i>bank</i>	Bank to set.
<i>channel</i>	Channel to set.
<i>sizeEntries</i>	Number of entries in LUT table to write. This must be the same size as <code>numEntries</code> returned by <code>GetLutInfo()</code> .
<i>pEntries</i>	Array containing LUT entries to write.

**Returns**

A `fc2Error` indicating the success or failure of the function.

**4.1.1.113 FLYCAPTURE2\_C API `fc2Error fc2SetProperty ( fc2Context context, fc2Property * prop )`**

Writes the settings for the specified property to the camera.

The property type must be specified in the Property structure passed into the function in order for the function to succeed. The absControl flag controls whether the absolute or integer value is written to the camera.

**Parameters**

<i>context</i>	The fc2Context to be used.
<i>prop</i>	Pointer to the Property structure to be used.

**Returns**

A fc2Error indicating the success or failure of the function.

**4.1.1.114 FLYCAPTURE2\_C\_API fc2Error fc2SetPropertyBroadcast ( fc2Context *context*, fc2Property \* *prop* )**

Writes the settings for the specified property to the camera.

The property type must be specified in the Property structure passed into the function in order for the function to succeed. The absControl flag controls whether the absolute or integer value is written to the camera.

**Parameters**

<i>context</i>	The fc2Context to be used.
<i>prop</i>	Pointer to the Property structure to be used.

**Returns**

A fc2Error indicating the success or failure of the function.

**4.1.1.115 FLYCAPTURE2\_C\_API fc2Error fc2SetStrobe ( fc2Context *context*, fc2StrobeControl \* *strobeControl* )**

Set current strobe settings to the camera.

The strobe pin must be specified in the structure before being passed in to the function.

**Parameters**

<i>context</i>	The fc2Context to be used.
<i>strobe-Control</i>	Structure providing strobe settings.

**Returns**

A fc2Error indicating the success or failure of the function.

**4.1.1.116 FLYCAPTURE2\_C\_API fc2Error fc2SetStrobeBroadcast ( fc2Context *context*,  
fc2StrobeControl \* *strobeControl* )**

Set current strobe settings to the camera.

The strobe pin must be specified in the structure before being passed in to the function.

**Parameters**

<i>context</i>	The fc2Context to be used.
<i>strobe-Control</i>	Structure providing strobe settings.

**Returns**

A fc2Error indicating the success or failure of the function.

**4.1.1.117 FLYCAPTURE2\_C\_API fc2Error fc2SetTriggerDelay ( fc2Context *context*,  
fc2TriggerDelay \* *triggerDelay* )**

Set the specified trigger delay settings to the camera.

**Parameters**

<i>context</i>	The fc2Context to be used.
<i>triggerDelay</i>	Structure providing trigger delay settings.

**Returns**

A fc2Error indicating the success or failure of the function.

**4.1.1.118 FLYCAPTURE2\_C\_API fc2Error fc2SetTriggerDelayBroadcast ( fc2Context *context*,  
fc2TriggerDelay \* *triggerDelay* )**

Set the specified trigger delay settings to the camera.

**Parameters**

<i>context</i>	The fc2Context to be used.
<i>triggerDelay</i>	Structure providing trigger delay settings.

**Returns**

A fc2Error indicating the success or failure of the function.

**4.1.1.119 FLYCAPTURE2\_C\_API fc2Error fc2SetTriggerMode ( fc2Context context, fc2TriggerMode \* triggerMode )**

Set the specified trigger settings to the camera.

**Parameters**

<i>context</i>	The fc2Context to be used.
<i>triggerMode</i>	Structure providing trigger mode settings.

**Returns**

A fc2Error indicating the success or failure of the function.

**4.1.1.120 FLYCAPTURE2\_C\_API fc2Error fc2SetTriggerModeBroadcast ( fc2Context context, fc2TriggerMode \* triggerMode )**

Set the specified trigger settings to the camera.

**Parameters**

<i>context</i>	The fc2Context to be used.
<i>triggerMode</i>	Structure providing trigger mode settings.

**Returns**

A fc2Error indicating the success or failure of the function.

**4.1.1.121 FLYCAPTURE2\_C\_API fc2Error fc2SetUserBuffers ( fc2Context context, unsigned char \*const ppMemBuffers, int size, int nNumBuffers )**

Specify user allocated buffers to use as image data buffers.

**Parameters**

<i>context</i>	The fc2Context to be used.
<i>ppMem- Buffers</i>	Pointer to memory buffers to be written to. The size of the data should be equal to (size * numBuffers) or larger.
<i>size</i>	The size of each buffer (in bytes).
<i>nNum- Buffers</i>	Number of buffers in the array.

**Returns**

A fc2Error indicating the success or failure of the function.

#### 4.1.1.122 FLYCAPTURE2\_C\_API **fc2Error** **fc2SetVideoModeAndFrameRate** ( **fc2Context** *context*, **fc2VideoMode** *videoMode*, **fc2FrameRate** *frameRate* )

Set the specified video mode and frame rate to the camera.

It is not possible to set the camera to VIDEOMODE\_FORMAT7 or FRAMERATE\_FORMAT7. Use the Format7 functions to set the camera into Format7.

##### Parameters

<i>context</i>	The fc2Context to be used.
<i>videoMode</i>	Video mode to set to camera.
<i>frameRate</i>	Frame rate to set to camera.

##### Returns

A fc2Error indicating the success or failure of the function.

#### 4.1.1.123 FLYCAPTURE2\_C\_API **fc2Error** **fc2StartCapture** ( **fc2Context** *context* )

Starts isochronous image capture.

It will use either the current video mode or the most recently set video mode of the camera.

##### Parameters

<i>context</i>	The fc2Context to be used.
----------------	----------------------------

##### Returns

A fc2Error indicating the success or failure of the function.

#### 4.1.1.124 FLYCAPTURE2\_C\_API **fc2Error** **fc2StartCaptureCallback** ( **fc2Context** *context*, **fc2ImageEventCallback** *pCallbackFn*, **void \*** *pCallbackData* )

Starts isochronous image capture.

It will use either the current video mode or the most recently set video mode of the camera. The callback function is called when a new image is received from the camera.

##### Parameters

<i>context</i>	The fc2Context to be used.
<i>pCallbackFn</i>	A function to be called when a new image is received.
<i>pCallbackData</i>	A pointer to data that can be passed to the callback function. A NULL pointer is acceptable.



**Returns**

A `fc2Error` indicating the success or failure of the function.

**4.1.1.125 FLYCAPTURE2\_C\_API `fc2Error` `fc2StartSyncCapture` ( unsigned int *numCameras*, `fc2Context` \* *pContexts* )**

Starts synchronized isochronous image capture on multiple cameras.

**Parameters**

<i>num-Cameras</i>	Number of <code>fc2Contexts</code> in the <code>ppCameras</code> array.
<i>pContexts</i>	Array of <code>fc2Contexts</code> .

**Returns**

A `fc2Error` indicating the success or failure of the function.

**4.1.1.126 FLYCAPTURE2\_C\_API `fc2Error` `fc2StartSyncCaptureCallback` ( unsigned int *numCameras*, `fc2Context` \* *pContexts*, `fc2ImageEventCallback` \* *pCallbackFns*, void \*\* *pCallbackDataArray* )**

Starts synchronized isochronous image capture on multiple cameras.

**Parameters**

<i>num-Cameras</i>	Number of <code>fc2Contexts</code> in the <code>ppCameras</code> array.
<i>pContexts</i>	Array of <code>fc2Contexts</code> .
<i>pCallback-Fns</i>	Array of callback functions for each camera.
<i>pCallback-DataArray</i>	Array of callback data pointers.

**Returns**

A `fc2Error` indicating the success or failure of the function.

**4.1.1.127 FLYCAPTURE2\_C\_API `fc2Error` `fc2StopCapture` ( `fc2Context` *context* )**

Stops isochronous image transfer and cleans up all associated resources.

**Parameters**

<i>context</i>	The <code>fc2Context</code> to be used.
----------------	---

**Returns**

A `fc2Error` indicating the success or failure of the function.

**4.1.1.128 FLYCAPTURE2\_C API `fc2Error fc2UnregisterCallback ( fc2Context context, fc2CallbackHandle callbackHandle )`**

Unregister a callback function.

**Parameters**

<i>context</i>	The <code>fc2Context</code> to be used.
<i>callback-Handle</i>	Unique callback handle.

**Returns**

A `fc2Error` indicating the success or failure of the function.

**4.1.1.129 FLYCAPTURE2\_C API `fc2Error fc2ValidateFormat7Settings ( fc2Context context, fc2Format7ImageSettings * imageSettings, BOOL * settingsAreValid, fc2Format7PacketInfo * packetInfo )`**

Validates `Format7ImageSettings` structure and returns valid packet size information if the image settings are valid.

The current image settings are cached while validation is taking place. The cached settings are restored when validation is complete.

**Parameters**

<i>context</i>	The <code>fc2Context</code> to be used.
<i>image-Settings</i>	Structure containing the image settings.
<i>settingsAre-Valid</i>	Whether the settings are valid.
<i>packetInfo</i>	Packet size information that can be used to determine a valid packet size.

**Returns**

A `fc2Error` indicating the success or failure of the function.

**4.1.1.130 FLYCAPTURE2\_C API `fc2Error fc2WriteGVCPMemory ( fc2Context context, unsigned int address, const unsigned char * pBuffer, unsigned int length )`**

Write a GVCP memory block.

## Parameters

<i>context</i>	The fc2Context to be used.
<i>address</i>	GVCP address to be write to.
<i>pBuffer</i>	Array containing data to be written.
<i>length</i>	Size of array, in quadlets.

## Returns

An Error indicating the success or failure of the function.

4.1.1.131 FLYCAPTURE2\_C\_API **fc2Error** fc2WriteGVCPRegister ( **fc2Context** *context*,  
unsigned int *address*, unsigned int *value* )

Write a GVCP register.

## Parameters

<i>context</i>	The fc2Context to be used.
<i>address</i>	GVCP address to be written to.
<i>value</i>	The value to be written.

## Returns

An Error indicating the success or failure of the function.

4.1.1.132 FLYCAPTURE2\_C\_API **fc2Error** fc2WriteGVCPRegisterBlock ( **fc2Context** *context*,  
unsigned int *address*, const unsigned int \* *pBuffer*, unsigned int *length* )

Write a GVCP register block.

## Parameters

<i>context</i>	The fc2Context to be used.
<i>address</i>	GVCP address to be write to.
<i>pBuffer</i>	Array containing data to be written.
<i>length</i>	Size of array, in quadlets.

## Returns

An Error indicating the success or failure of the function.

4.1.1.133 FLYCAPTURE2\_C\_API **fc2Error** fc2WriteGVCPRegisterBroadcast ( **fc2Context**  
*context*, unsigned int *address*, unsigned int *value* )

Write a GVCP register with broadcast.

## Parameters

<i>context</i>	The fc2Context to be used.
<i>address</i>	GVCP address to be written to.
<i>value</i>	The value to be written.

## Returns

An Error indicating the success or failure of the function.

**4.1.1.134 FLYCAPTURE2\_C\_API fc2Error fc2WriteRegister ( fc2Context *context*, unsigned int *address*, unsigned int *value* )**

Write to the specified register on the camera.

## Parameters

<i>context</i>	The fc2Context to be used.
<i>address</i>	DCAM address to be written to.
<i>value</i>	The value to be written.

## Returns

A fc2Error indicating the success or failure of the function.

**4.1.1.135 FLYCAPTURE2\_C\_API fc2Error fc2WriteRegisterBlock ( fc2Context *context*, unsigned short *addressHigh*, unsigned int *addressLow*, const unsigned int \* *pBuffer*, unsigned int *length* )**

Write to the specified register block on the camera.

## Parameters

<i>context</i>	The fc2Context to be used.
<i>addressHigh</i>	Top 16 bits of the 48 bit absolute address to write to.
<i>addressLow</i>	Bottom 32 bits of the 48 bits absolute address to write to.
<i>pBuffer</i>	Array containing data to be written.
<i>length</i>	Size of array, in quadlets.

**Returns**

A `fc2Error` indicating the success or failure of the function.

4.1.1.136 FLYCAPTURE2.C API `fc2Error fc2WriteRegisterBroadcast ( fc2Context context, unsigned int address, unsigned int value )`

Write to the specified register on the camera with broadcast.

**Parameters**

<i>context</i>	The <code>fc2Context</code> to be used.
<i>address</i>	DCAM address to be written to.
<i>value</i>	The value to be written.

**Returns**

A `fc2Error` indicating the success or failure of the function.

## 4.2 FlyCapture2Defs\_C.h File Reference

**Data Structures**

- struct [fc2PGRGuid](#)  
A GUID to the camera.
- struct [fc2Image](#)
- struct [fc2SystemInfo](#)
- struct [fc2Version](#)
- struct [fc2Config](#)
- struct [fc2TriggerDelayInfo](#)
- struct [fc2TriggerDelay](#)
- struct [fc2TriggerModelInfo](#)
- struct [fc2TriggerMode](#)
- struct [fc2StrobeInfo](#)
- struct [fc2StrobeControl](#)
- struct [fc2Format7ImageSettings](#)
- struct [fc2Format7Info](#)
- struct [fc2Format7PacketInfo](#)
- struct [fc2IPAddress](#)
- struct [fc2MACAddress](#)
- struct [fc2GigEProperty](#)
- struct [fc2GigEStreamChannel](#)
- struct [fc2GigEConfig](#)
- struct [fc2GigEImageSettingsInfo](#)
- struct [fc2GigEImageSettings](#)

- struct [fc2TimeStamp](#)
- struct [fc2ConfigROM](#)
- struct [fc2CameraInfo](#)
- struct [fc2EmbeddedImageInfoProperty](#)
- struct [fc2EmbeddedImageInfo](#)
- struct [fc2ImageMetadata](#)
- struct [fc2LUTData](#)
- struct [fc2PNGOption](#)
- struct [fc2PPMOption](#)
- struct [fc2PGMOption](#)
- struct [fc2TIFFOption](#)
- struct [fc2JPEGOOption](#)
- struct [fc2JPG2Option](#)
- struct [fc2AVIOption](#)
- struct [fc2MJPGOption](#)
- struct [fc2H264Option](#)

## Defines

- #define [FALSE](#) 0
- #define [TRUE](#) 1
- #define [FULL\\_32BIT\\_VALUE](#) 0xFFFFFFFF
- #define [MAX\\_STRING\\_LENGTH](#) 512

## Typedefs

- typedef int [BOOL](#)
- typedef void \* [fc2Context](#)  
*A context to the FlyCapture2 C library.*
- typedef void \* [fc2GuiContext](#)  
*A context to the FlyCapture2 C GUI library.*
- typedef void \* [fc2ImageImpl](#)  
*An internal pointer used in the [fc2Image](#) structure.*
- typedef void \* [fc2AVIContext](#)  
*A context referring to the AVI recorder object.*
- typedef void \* [fc2ImageStatisticsContext](#)  
*A context referring to the ImageStatistics object.*
- typedef void \* [fc2CallbackHandle](#)
- typedef void(\* [fc2BusEventCallback](#) )(void \*pParameter, unsigned int serial-Number)
- typedef void(\* [fc2ImageEventCallback](#) )(fc2Image \*image, void \*pCallbackData)
- typedef void(\* [fc2AsyncCommandCallback](#) )(fc2Error retError, void \*pUserData)

## Enumerations

- enum `fc2Error` { `FC2_ERROR_UNDEFINED` = -1, `FC2_ERROR_OK`, `FC2_ERROR_FAILED`, `FC2_ERROR_NOT_IMPLEMENTED`, `FC2_ERROR_FAILED_BUS_MASTER_CONNECTION`, `FC2_ERROR_NOT_CONNECTED`, `FC2_ERROR_INIT_FAILED`, `FC2_ERROR_NOT_INITIALIZED`, `FC2_ERROR_INVALID_PARAMETER`, `FC2_ERROR_INVALID_SETTINGS`, `FC2_ERROR_INVALID_BUS_MANAGER`, `FC2_ERROR_MEMORY_ALLOCATION_FAILED`, `FC2_ERROR_LOW_LEVEL_FAILURE`, `FC2_ERROR_NOT_FOUND`, `FC2_ERROR_FAILED_GUID`, `FC2_ERROR_INVALID_PACKET_SIZE`, `FC2_ERROR_INVALID_MODE`, `FC2_ERROR_NOT_IN_FORMAT7`, `FC2_ERROR_NOT_SUPPORTED`, `FC2_ERROR_TIMEOUT`, `FC2_ERROR_BUS_MASTER_FAILED`, `FC2_ERROR_INVALID_GENERATION`, `FC2_ERROR_LUT_FAILED`, `FC2_ERROR_IIDC_FAILED`, `FC2_ERROR_STROBE_FAILED`, `FC2_ERROR_TRIGGER_FAILED`, `FC2_ERROR_PROPERTY_FAILED`, `FC2_ERROR_PROPERTY_NOT_PRESENT`, `FC2_ERROR_REGISTER_FAILED`, `FC2_ERROR_READ_REGISTER_FAILED`, `FC2_ERROR_WRITE_REGISTER_FAILED`, `FC2_ERROR_ISOCH_FAILED`, `FC2_ERROR_ISOCH_ALREADY_STARTED`, `FC2_ERROR_ISOCH_NOT_STARTED`, `FC2_ERROR_ISOCH_START_FAILED`, `FC2_ERROR_ISOCH_RETRIEVE_BUFFER_FAILED`, `FC2_ERROR_ISOCH_STOP_FAILED`, `FC2_ERROR_ISOCH_SYNC_FAILED`, `FC2_ERROR_ISOCH_BANDWIDTH_EXCEEDED`, `FC2_ERROR_IMAGE_CONVERSION_FAILED`, `FC2_ERROR_IMAGE_LIBRARY_FAILURE`, `FC2_ERROR_BUFFER_TOO_SMALL`, `FC2_ERROR_IMAGE_CONSISTENCY_ERROR`, `FC2_ERROR_FORCE_32BITS` = `FULL_32BIT_VALUE` }
- enum `fc2BusCallbackType` { `FC2_BUS_RESET`, `FC2_ARRIVAL`, `FC2_REMOVAL`, `FC2_CALLBACK_TYPE_FORCE_32BITS` = `FULL_32BIT_VALUE` }
- enum `fc2GrabMode` { `FC2_DROP_FRAMES`, `FC2_BUFFER_FRAMES`, `FC2_UNSPECIFIED_GRAB_MODE`, `FC2_GRAB_MODE_FORCE_32BITS` = `FULL_32BIT_VALUE` }
- enum `fc2GrabTimeout` { `FC2_TIMEOUT_NONE` = 0, `FC2_TIMEOUT_INFINITE` = -1, `FC2_TIMEOUT_UNSPECIFIED` = -2, `FC2_GRAB_TIMEOUT_FORCE_32BITS` = `FULL_32BIT_VALUE` }
- enum `fc2BandwidthAllocation` { `FC2_BANDWIDTH_ALLOCATION_OFF` = 0, `FC2_BANDWIDTH_ALLOCATION_ON` = 1, `FC2_BANDWIDTH_ALLOCATION_UNSUPPORTED` = 2, `FC2_BANDWIDTH_ALLOCATION_UNSPECIFIED` = 3, `FC2_BANDWIDTH_ALLOCATION_FORCE_32BITS` = `FULL_32BIT_VALUE` }
- enum `fc2InterfaceType` { `FC2_INTERFACE_IEEE1394`, `FC2_INTERFACE_USB_2`, `FC2_INTERFACE_USB_3`, `FC2_INTERFACE_GIGE`, `FC2_INTERFACE_UNKNOWN`, `FC2_INTERFACE_TYPE_FORCE_32BITS` = `FULL_32BIT_VALUE` }
- enum `fc2DriverType` { `FC2_DRIVER_1394_CAM`, `FC2_DRIVER_1394_PRO`, `FC2_DRIVER_1394_JUJU`, `FC2_DRIVER_1394_VIDEO1394`, `FC2_DRIVER_1394_RAW1394`, `FC2_DRIVER_USB_NONE`, `FC2_DRIVER_USB_CAM`, `FC2_DRIVER_USB3_PRO`, `FC2_DRIVER_GIGE_NONE`, `FC2_DRIVER_GIGE_FILTER`, `FC2_DRIVER_GIGE_PRO`, `FC2_DRIVER_UNKNOWN` = -1, `FC2_DRIVER_FORCE_32BITS` = `FULL_32BIT_VALUE` }

*Types of low level drivers that flycapture uses.*

- enum `fc2PropertyType` { `FC2_BRIGHTNESS`, `FC2_AUTO_EXPOSURE`, `FC2_SHARPNESS`, `FC2_WHITE_BALANCE`, `FC2_HUE`, `FC2_SATURATION`, `FC2_GAMMA`, `FC2_IRIS`, `FC2_FOCUS`, `FC2_ZOOM`, `FC2_PAN`, `FC2_TILT`, `FC2_SHUTTER`, `FC2_GAIN`, `FC2_TRIGGER_MODE`, `FC2_TRIGGER_DELAY`, `FC2_FRAME_RATE`, `FC2_TEMPERATURE`, `FC2_UNSPECIFIED_PROPERTY_TYPE`, `FC2_PROPERTY_TYPE_FORCE_32BITS` = `FULL_32BIT_VALUE` }
- enum `fc2FrameRate` { `FC2_FRAMERATE_1_875`, `FC2_FRAMERATE_3_75`, `FC2_FRAMERATE_7_5`, `FC2_FRAMERATE_15`, `FC2_FRAMERATE_30`, `FC2_FRAMERATE_60`, `FC2_FRAMERATE_120`, `FC2_FRAMERATE_240`, `FC2_FRAMERATE_FORMAT7`, `FC2_NUM_FRAMERATES`, `FC2_FRAMERATE_FORCE_32BITS` = `FULL_32BIT_VALUE` }
- enum `fc2VideoMode` { `FC2_VIDEOMODE_160x120YUV444`, `FC2_VIDEOMODE_320x240YUV422`, `FC2_VIDEOMODE_640x480YUV411`, `FC2_VIDEOMODE_640x480YUV422`, `FC2_VIDEOMODE_640x480RGB`, `FC2_VIDEOMODE_640x480Y8`, `FC2_VIDEOMODE_640x480Y16`, `FC2_VIDEOMODE_800x600YUV422`, `FC2_VIDEOMODE_800x600RGB`, `FC2_VIDEOMODE_800x600Y8`, `FC2_VIDEOMODE_800x600Y16`, `FC2_VIDEOMODE_1024x768YUV422`, `FC2_VIDEOMODE_1024x768RGB`, `FC2_VIDEOMODE_1024x768Y8`, `FC2_VIDEOMODE_1024x768Y16`, `FC2_VIDEOMODE_1280x960YUV422`, `FC2_VIDEOMODE_1280x960RGB`, `FC2_VIDEOMODE_1280x960Y8`, `FC2_VIDEOMODE_1280x960Y16`, `FC2_VIDEOMODE_1600x1200YUV422`, `FC2_VIDEOMODE_1600x1200RGB`, `FC2_VIDEOMODE_1600x1200Y8`, `FC2_VIDEOMODE_1600x1200Y16`, `FC2_VIDEOMODE_FORMAT7`, `FC2_NUM_VIDEOMODES`, `FC2_VIDEOMODE_FORCE_32BITS` = `FULL_32BIT_VALUE` }
- enum `fc2Mode` { `FC2_MODE_0` = 0, `FC2_MODE_1`, `FC2_MODE_2`, `FC2_MODE_3`, `FC2_MODE_4`, `FC2_MODE_5`, `FC2_MODE_6`, `FC2_MODE_7`, `FC2_MODE_8`, `FC2_MODE_9`, `FC2_MODE_10`, `FC2_MODE_11`, `FC2_MODE_12`, `FC2_MODE_13`, `FC2_MODE_14`, `FC2_MODE_15`, `FC2_MODE_16`, `FC2_MODE_17`, `FC2_MODE_18`, `FC2_MODE_19`, `FC2_MODE_20`, `FC2_MODE_21`, `FC2_MODE_22`, `FC2_MODE_23`, `FC2_MODE_24`, `FC2_MODE_25`, `FC2_MODE_26`, `FC2_MODE_27`, `FC2_MODE_28`, `FC2_MODE_29`, `FC2_MODE_30`, `FC2_MODE_31`, `FC2_NUM_MODES`, `FC2_MODE_FORCE_32BITS` = `FULL_32BIT_VALUE` }
- enum `fc2PixelFormat` { `FC2_PIXEL_FORMAT_MONO8` = 0x80000000, `FC2_PIXEL_FORMAT_411YUV8` = 0x40000000, `FC2_PIXEL_FORMAT_422YUV8` = 0x20000000, `FC2_PIXEL_FORMAT_444YUV8` = 0x10000000, `FC2_PIXEL_FORMAT_RGB8` = 0x08000000, `FC2_PIXEL_FORMAT_MONO16` = 0x04000000, `FC2_PIXEL_FORMAT_RGB16` = 0x02000000, `FC2_PIXEL_FORMAT_S_MONO16` = 0x01000000, `FC2_PIXEL_FORMAT_S_RGB16` = 0x00800000, `FC2_PIXEL_FORMAT_RAW8` = 0x00400000, `FC2_PIXEL_FORMAT_RAW16` = 0x00200000, `FC2_PIXEL_FORMAT_MONO12` = 0x00100000, `FC2_PIXEL_FORMAT_RAW12` = 0x00080000, `FC2_PIXEL_FORMAT_BGR` = 0x80000008, `FC2_PIXEL_FORMAT_BGRU` = 0x40000008, `FC2_PIXEL_FORMAT_RGB` = `FC2_PIXEL_FORMAT_RGB8`, `FC2_PIXEL_FORMAT_RGBU` = 0x40000002, `FC2_PIXEL_FORMAT_BGR16` = 0x02000001, `FC2_PIXEL_FORMAT_BGRU16` = 0x02000002, `FC2_PIXEL_FORMAT_422YUV8_JPEG` = 0x40000001, `FC2_NUM_PIXEL_FORMATS` = 20, `FC2_UNSPECIFIED_PIXEL_FORMAT` = 0 }



- enum `fc2BusSpeed` { `FC2_BUSSPEED_S100`, `FC2_BUSSPEED_S200`, `FC2_BUSSPEED_S400`, `FC2_BUSSPEED_S480`, `FC2_BUSSPEED_S800`, `FC2_BUSSPEED_S1600`, `FC2_BUSSPEED_S3200`, `FC2_BUSSPEED_S5000`, `FC2_BUSSPEED_10BASE_T`, `FC2_BUSSPEED_100BASE_T`, `FC2_BUSSPEED_1000BASE_T`, `FC2_BUSSPEED_10000BASE_T`, `FC2_BUSSPEED_S_FASTEST`, `FC2_BUSSPEED_ANY`, `FC2_BUSSPEED_SPEED_UNKNOWN` = -1, `FC2_BUSSPEED_FORCE_32BITS` = `FULL_32BIT_VALUE` }
- enum `fc2PCleBusSpeed` { `FC2_PCIE_BUSSPEED_2_5`, `FC2_PCIE_BUSSPEED_5_0`, `FC2_PCIE_BUSSPEED_UNKNOWN` = -1, `FC2_PCIE_BUSSPEED_FORCE_32BITS` = `FULL_32BIT_VALUE` }
- enum `fc2ColorProcessingAlgorithm` { `FC2_DEFAULT`, `FC2_NO_COLOR_PROCESSING`, `FC2_NEAREST_NEIGHBOR_FAST`, `FC2_EDGE_SENSING`, `FC2_HQ_LINEAR`, `FC2_RIGOROUS`, `FC2_IPP`, `FC2_DIRECTIONAL`, `FC2_COLOR_PROCESSING_ALGORITHM_FORCE_32BITS` = `FULL_32BIT_VALUE` }
- enum `fc2BayerTileFormat` { `FC2_BT_NONE`, `FC2_BT_RGGB`, `FC2_BT_GRBG`, `FC2_BT_GBRG`, `FC2_BT_BGGR`, `FC2_BT_FORCE_32BITS` = `FULL_32BIT_VALUE` }
- enum `fc2ImageFileFormat` { `FC2_FROM_FILE_EXT` = -1, `FC2_PGM`, `FC2_PPM`, `FC2_BMP`, `FC2_JPEG`, `FC2_JPEG2000`, `FC2_TIFF`, `FC2_PNG`, `FC2_RAW`, `FC2_IMAGE_FILE_FORMAT_FORCE_32BITS` = `FULL_32BIT_VALUE` }
- enum `fc2GigEPropertyType` { `FC2_HEARTBEAT`, `FC2_HEARTBEAT_TIMEOUT` }
- enum `fc2StatisticsChannel` { `FC2_STATISTICS_GREY`, `FC2_STATISTICS_RED`, `FC2_STATISTICS_GREEN`, `FC2_STATISTICS_BLUE`, `FC2_STATISTICS_HUE`, `FC2_STATISTICS_SATURATION`, `FC2_STATISTICS_LIGHTNESS`, `FC2_STATISTICS_FORCE_32BITS` = `FULL_32BIT_VALUE` }
- enum `fc2OSType` { `FC2_WINDOWS_X86`, `FC2_WINDOWS_X64`, `FC2_LINUX_X86`, `FC2_LINUX_X64`, `FC2_MAC`, `FC2_UNKNOWN_OS`, `FC2_OSTYPE_FORCE_32BITS` = `FULL_32BIT_VALUE` }
- enum `fc2ByteOrder` { `FC2_BYTE_ORDER_LITTLE_ENDIAN`, `FC2_BYTE_ORDER_BIG_ENDIAN`, `FC2_BYTE_ORDER_FORCE_32BITS` = `FULL_32BIT_VALUE` }
- enum `fc2TIFFCompressionMethod` { `FC2_TIFF_NONE` = 1, `FC2_TIFF_PACKBITS`, `FC2_TIFF_DEFLATE`, `FC2_TIFF_ADOBE_DEFLATE`, `FC2_TIFF_CCITT`, `FC2_TIFF_CCITTFAX3`, `FC2_TIFF_CCITTFAX4`, `FC2_TIFF_LZW`, `FC2_TIFF_JPEG` }

### 4.2.1 Define Documentation

4.2.1.1 `#define FALSE 0`

4.2.1.2 `#define FULL_32BIT_VALUE 0x7FFFFFFF`

4.2.1.3 `#define MAX_STRING_LENGTH 512`

4.2.1.4 `#define TRUE 1`

## 4.2.2 Typedef Documentation

### 4.2.2.1 typedef int BOOL

### 4.2.2.2 typedef void(\* fc2AsyncCommandCallback)(fc2Error retError, void \*pUserData)

### 4.2.2.3 typedef void\* fc2AVIContext

A context referring to the AVI recorder object.

### 4.2.2.4 typedef void(\* fc2BusEventCallback)(void \*pParameter, unsigned int serialNumber)

### 4.2.2.5 typedef void\* fc2CallbackHandle

### 4.2.2.6 typedef void\* fc2Context

A context to the FlyCapture2 C library.

It must be created before performing any calls to the library.

### 4.2.2.7 typedef void\* fc2GuiContext

A context to the FlyCapture2 C GUI library.

It must be created before performing any calls to the library.

### 4.2.2.8 typedef void(\* fc2ImageEventCallback)(fc2Image \*image, void \*pCallbackData)

### 4.2.2.9 typedef void\* fc2ImageImpl

An internal pointer used in the [fc2Image](#) structure.

### 4.2.2.10 typedef void\* fc2ImageStatisticsContext

A context referring to the ImageStatistics object.

## 4.2.3 Enumeration Type Documentation

### 4.2.3.1 enum fc2BandwidthAllocation

Enumerator:

```
FC2_BANDWIDTH_ALLOCATION_OFF  
FC2_BANDWIDTH_ALLOCATION_ON  
FC2_BANDWIDTH_ALLOCATION_UNSUPPORTED  
FC2_BANDWIDTH_ALLOCATION_UNSPECIFIED
```

***FC2\_BANDWIDTH\_ALLOCATION\_FORCE\_32BITS***

## 4.2.3.2 enum fc2BayerTileFormat

Enumerator:

***FC2\_BT\_NONE*** No bayer tile format.  
***FC2\_BT\_RGGB*** Red-Green-Green-Blue.  
***FC2\_BT\_GRBG*** Green-Red-Blue-Green.  
***FC2\_BT\_GBRG*** Green-Blue-Red-Green.  
***FC2\_BT\_BGGR*** Blue-Green-Green-Red.  
***FC2\_BT\_FORCE\_32BITS***

## 4.2.3.3 enum fc2BusCallbackType

Enumerator:

***FC2\_BUS\_RESET***  
***FC2\_ARRIVAL***  
***FC2\_REMOVAL***  
***FC2\_CALLBACK\_TYPE\_FORCE\_32BITS***

## 4.2.3.4 enum fc2BusSpeed

Enumerator:

***FC2\_BUSSPEED\_S100*** 100Mbps/sec.  
***FC2\_BUSSPEED\_S200*** 200Mbps/sec.  
***FC2\_BUSSPEED\_S400*** 400Mbps/sec.  
***FC2\_BUSSPEED\_S480*** 480Mbps/sec. Only for USB2 cameras.  
***FC2\_BUSSPEED\_S800*** 800Mbps/sec.  
***FC2\_BUSSPEED\_S1600*** 1600Mbps/sec.  
***FC2\_BUSSPEED\_S3200*** 3200Mbps/sec.  
***FC2\_BUSSPEED\_S5000*** 5000Mbps/sec. Only for USB3 cameras.  
***FC2\_BUSSPEED\_10BASE\_T*** 10Base-T. Only for GigE cameras.  
***FC2\_BUSSPEED\_100BASE\_T*** 100Base-T. Only for GigE cameras.  
***FC2\_BUSSPEED\_1000BASE\_T*** 1000Base-T (Gigabit Ethernet). Only for GigE cameras.  
***FC2\_BUSSPEED\_10000BASE\_T*** 10000Base-T. Only for GigE cameras.  
***FC2\_BUSSPEED\_S\_FASTEST*** The fastest speed available.  
***FC2\_BUSSPEED\_ANY*** Any speed that is available.  
***FC2\_BUSSPEED\_SPEED\_UNKNOWN*** Unknown bus speed.  
***FC2\_BUSSPEED\_FORCE\_32BITS***

## 4.2.3.5 enum fc2ByteOrder

Enumerator:

***FC2\_BYTE\_ORDER\_LITTLE\_ENDIAN***  
***FC2\_BYTE\_ORDER\_BIG\_ENDIAN***  
***FC2\_BYTE\_ORDER\_FORCE\_32BITS***

## 4.2.3.6 enum fc2ColorProcessingAlgorithm

Enumerator:

***FC2\_DEFAULT***  
***FC2\_NO\_COLOR\_PROCESSING***  
***FC2\_NEAREST\_NEIGHBOR\_FAST***  
***FC2\_EDGE\_SENSING***  
***FC2\_HQ\_LINEAR***  
***FC2\_RIGOROUS***  
***FC2\_IPP***  
***FC2\_DIRECTIONAL***  
***FC2\_COLOR\_PROCESSING\_ALGORITHM\_FORCE\_32BITS***

## 4.2.3.7 enum fc2DriverType

Types of low level drivers that flycapture uses.

Enumerator:

***FC2\_DRIVER\_1394\_CAM*** PGRCam.sys.  
***FC2\_DRIVER\_1394\_PRO*** PGR1394.sys.  
***FC2\_DRIVER\_1394\_JUJU*** firewire\_core.  
***FC2\_DRIVER\_1394\_VIDEO1394*** video1394.  
***FC2\_DRIVER\_1394\_RAW1394*** raw1394.  
***FC2\_DRIVER\_USB\_NONE*** No usb driver used just BSD stack. (Linux only)  
***FC2\_DRIVER\_USB\_CAM*** PGRUsbCam.sys.  
***FC2\_DRIVER\_USB3\_PRO*** PGRXHCl.sys.  
***FC2\_DRIVER\_GIGE\_NONE*** no gige drivers used,MS/BSD stack.  
***FC2\_DRIVER\_GIGE\_FILTER*** PGRGigE.sys.  
***FC2\_DRIVER\_GIGE\_PRO*** PGRGigEPro.sys.  
***FC2\_DRIVER\_UNKNOWN*** Unknown driver type.  
***FC2\_DRIVER\_FORCE\_32BITS***

## 4.2.3.8 enum fc2Error

Enumerator:

**FC2\_ERROR\_UNDEFINED** Undefined.

**FC2\_ERROR\_OK** Function returned with no errors.

**FC2\_ERROR\_FAILED** General failure.

**FC2\_ERROR\_NOT\_IMPLEMENTED** Function has not been implemented.

**FC2\_ERROR\_FAILED\_BUS\_MASTER\_CONNECTION** Could not connect to -  
Bus Master.

**FC2\_ERROR\_NOT\_CONNECTED** Camera has not been connected.

**FC2\_ERROR\_INIT\_FAILED** Initialization failed.

**FC2\_ERROR\_NOT\_INITIALIZED** Camera has not been initialized.

**FC2\_ERROR\_INVALID\_PARAMETER** Invalid parameter passed to function.

**FC2\_ERROR\_INVALID\_SETTINGS** Setting set to camera is invalid.

**FC2\_ERROR\_INVALID\_BUS\_MANAGER** Invalid Bus Manager object.

**FC2\_ERROR\_MEMORY\_ALLOCATION\_FAILED** Could not allocate memory.

**FC2\_ERROR\_LOW\_LEVEL\_FAILURE** Low level error.

**FC2\_ERROR\_NOT\_FOUND** Device not found.

**FC2\_ERROR\_FAILED\_GUID** GUID failure.

**FC2\_ERROR\_INVALID\_PACKET\_SIZE** Packet size set to camera is invalid.

**FC2\_ERROR\_INVALID\_MODE** Invalid mode has been passed to function.

**FC2\_ERROR\_NOT\_IN\_FORMAT7** Error due to not being in Format7.

**FC2\_ERROR\_NOT\_SUPPORTED** This feature is unsupported.

**FC2\_ERROR\_TIMEOUT** Timeout error.

**FC2\_ERROR\_BUS\_MASTER\_FAILED** Bus Master Failure.

**FC2\_ERROR\_INVALID\_GENERATION** Generation Count Mismatch.

**FC2\_ERROR\_LUT\_FAILED** Look Up Table failure.

**FC2\_ERROR\_IIDC\_FAILED** IIDC failure.

**FC2\_ERROR\_STROBE\_FAILED** Strobe failure.

**FC2\_ERROR\_TRIGGER\_FAILED** Trigger failure.

**FC2\_ERROR\_PROPERTY\_FAILED** Property failure.

**FC2\_ERROR\_PROPERTY\_NOT\_PRESENT** Property is not present.

**FC2\_ERROR\_REGISTER\_FAILED** Register access failed.

**FC2\_ERROR\_READ\_REGISTER\_FAILED** Register read failed.

**FC2\_ERROR\_WRITE\_REGISTER\_FAILED** Register write failed.

**FC2\_ERROR\_ISOCH\_FAILED** Isochronous failure.

**FC2\_ERROR\_ISOCH\_ALREADY\_STARTED** Isochronous transfer has already  
been started.

**FC2\_ERROR\_ISOCH\_NOT\_STARTED** Isochronous transfer has not been  
started.

**FC2\_ERROR\_ISOCH\_START\_FAILED** Isochronous start failed.

**FC2\_ERROR\_ISOCH\_RETRIEVE\_BUFFER\_FAILED** Isochronous retrieve buffer failed.

**FC2\_ERROR\_ISOCH\_STOP\_FAILED** Isochronous stop failed.

**FC2\_ERROR\_ISOCH\_SYNC\_FAILED** Isochronous image synchronization failed.

**FC2\_ERROR\_ISOCH\_BANDWIDTH\_EXCEEDED** Isochronous bandwidth exceeded.

**FC2\_ERROR\_IMAGE\_CONVERSION\_FAILED** Image conversion failed.

**FC2\_ERROR\_IMAGE\_LIBRARY\_FAILURE** Image library failure.

**FC2\_ERROR\_BUFFER\_TOO\_SMALL** Buffer is too small.

**FC2\_ERROR\_IMAGE\_CONSISTENCY\_ERROR** There is an image consistency error.

**FC2\_ERROR\_FORCE\_32BITS**

#### 4.2.3.9 enum fc2FrameRate

Enumerator:

**FC2\_FRAMERATE\_1\_875** 1.875 fps.

**FC2\_FRAMERATE\_3\_75** 3.75 fps.

**FC2\_FRAMERATE\_7\_5** 7.5 fps.

**FC2\_FRAMERATE\_15** 15 fps.

**FC2\_FRAMERATE\_30** 30 fps.

**FC2\_FRAMERATE\_60** 60 fps.

**FC2\_FRAMERATE\_120** 120 fps.

**FC2\_FRAMERATE\_240** 240 fps.

**FC2\_FRAMERATE\_FORMAT7** Custom frame rate for Format7 functionality.

**FC2\_NUM\_FRAMERATES** Number of possible camera frame rates.

**FC2\_FRAMERATE\_FORCE\_32BITS**

#### 4.2.3.10 enum fc2GigEPropertyType

Enumerator:

**FC2\_HEARTBEAT**

**FC2\_HEARTBEAT\_TIMEOUT**

## 4.2.3.11 enum fc2GrabMode

Enumerator:

***FC2\_DROP\_FRAMES***  
***FC2\_BUFFER\_FRAMES***  
***FC2\_UNSPECIFIED\_GRAB\_MODE***  
***FC2\_GRAB\_MODE\_FORCE\_32BITS***

## 4.2.3.12 enum fc2GrabTimeout

Enumerator:

***FC2\_TIMEOUT\_NONE***  
***FC2\_TIMEOUT\_INFINITE***  
***FC2\_TIMEOUT\_UNSPECIFIED***  
***FC2\_GRAB\_TIMEOUT\_FORCE\_32BITS***

## 4.2.3.13 enum fc2ImageFileFormat

Enumerator:

***FC2\_FROM\_FILE\_EXT*** Determine file format from file extension.  
***FC2\_PGM*** Portable gray map.  
***FC2\_PPM*** Portable pixmap.  
***FC2\_BMP*** Bitmap.  
***FC2\_JPEG*** JPEG.  
***FC2\_JPEG2000*** JPEG 2000.  
***FC2\_TIFF*** Tagged image file format.  
***FC2\_PNG*** Portable network graphics.  
***FC2\_RAW*** Raw data.  
***FC2\_IMAGE\_FILE\_FORMAT\_FORCE\_32BITS***

## 4.2.3.14 enum fc2InterfaceType

Enumerator:

***FC2\_INTERFACE\_IEEE1394***  
***FC2\_INTERFACE\_USB\_2***  
***FC2\_INTERFACE\_USB\_3***  
***FC2\_INTERFACE\_GIGE***  
***FC2\_INTERFACE\_UNKNOWN***  
***FC2\_INTERFACE\_TYPE\_FORCE\_32BITS***

## 4.2.3.15 enum fc2Mode

Enumerator:

***FC2\_MODE\_0***  
***FC2\_MODE\_1***  
***FC2\_MODE\_2***  
***FC2\_MODE\_3***  
***FC2\_MODE\_4***  
***FC2\_MODE\_5***  
***FC2\_MODE\_6***  
***FC2\_MODE\_7***  
***FC2\_MODE\_8***  
***FC2\_MODE\_9***  
***FC2\_MODE\_10***  
***FC2\_MODE\_11***  
***FC2\_MODE\_12***  
***FC2\_MODE\_13***  
***FC2\_MODE\_14***  
***FC2\_MODE\_15***  
***FC2\_MODE\_16***  
***FC2\_MODE\_17***  
***FC2\_MODE\_18***  
***FC2\_MODE\_19***  
***FC2\_MODE\_20***  
***FC2\_MODE\_21***  
***FC2\_MODE\_22***  
***FC2\_MODE\_23***  
***FC2\_MODE\_24***  
***FC2\_MODE\_25***  
***FC2\_MODE\_26***  
***FC2\_MODE\_27***  
***FC2\_MODE\_28***  
***FC2\_MODE\_29***  
***FC2\_MODE\_30***  
***FC2\_MODE\_31***  
***FC2\_NUM\_MODES*** Number of modes.  
***FC2\_MODE\_FORCE\_32BITS***



## 4.2.3.16 enum fc2OSType

Enumerator:

**FC2\_WINDOWS\_X86**  
**FC2\_WINDOWS\_X64**  
**FC2\_LINUX\_X86**  
**FC2\_LINUX\_X64**  
**FC2\_MAC**  
**FC2\_UNKNOWN\_OS**  
**FC2\_OSTYPE\_FORCE\_32BITS**

## 4.2.3.17 enum fc2PCleBusSpeed

Enumerator:

**FC2\_PCIE\_BUSSPEED\_2\_5**  
**FC2\_PCIE\_BUSSPEED\_5\_0** 2.5 Gb/s  
**FC2\_PCIE\_BUSSPEED\_UNKNOWN** 5.0 Gb/s  
**FC2\_PCIE\_BUSSPEED\_FORCE\_32BITS** Speed is unknown.

## 4.2.3.18 enum fc2PixelFormat

Enumerator:

**FC2\_PIXEL\_FORMAT\_MONO8** 8 bits of mono information.  
**FC2\_PIXEL\_FORMAT\_411YUV8** YUV 4:1:1.  
**FC2\_PIXEL\_FORMAT\_422YUV8** YUV 4:2:2.  
**FC2\_PIXEL\_FORMAT\_444YUV8** YUV 4:4:4.  
**FC2\_PIXEL\_FORMAT\_RGB8** R = G = B = 8 bits.  
**FC2\_PIXEL\_FORMAT\_MONO16** 16 bits of mono information.  
**FC2\_PIXEL\_FORMAT\_RGB16** R = G = B = 16 bits.  
**FC2\_PIXEL\_FORMAT\_S\_MONO16** 16 bits of signed mono information.  
**FC2\_PIXEL\_FORMAT\_S\_RGB16** R = G = B = 16 bits signed.  
**FC2\_PIXEL\_FORMAT\_RAW8** 8 bit raw data output of sensor.  
**FC2\_PIXEL\_FORMAT\_RAW16** 16 bit raw data output of sensor.  
**FC2\_PIXEL\_FORMAT\_MONO12** 12 bits of mono information.  
**FC2\_PIXEL\_FORMAT\_RAW12** 12 bit raw data output of sensor.  
**FC2\_PIXEL\_FORMAT\_BGR** 24 bit BGR.  
**FC2\_PIXEL\_FORMAT\_BGRU** 32 bit BGRU.  
**FC2\_PIXEL\_FORMAT\_RGB** 24 bit RGB.

***FC2\_PIXEL\_FORMAT\_RGBU*** 32 bit RGBU.  
***FC2\_PIXEL\_FORMAT\_BGR16*** R = G = B = 16 bits.  
***FC2\_PIXEL\_FORMAT\_BGRU16*** 64 bit BGRU.  
***FC2\_PIXEL\_FORMAT\_422YUV8\_JPEG*** JPEG compressed stream.  
***FC2\_NUM\_PIXEL\_FORMATS*** Number of pixel formats.  
***FC2\_UNSPECIFIED\_PIXEL\_FORMAT*** Unspecified pixel format.

#### 4.2.3.19 enum fc2PropertyType

Enumerator:

***FC2\_BRIGHTNESS***  
***FC2\_AUTO\_EXPOSURE***  
***FC2\_SHARPNESS***  
***FC2\_WHITE\_BALANCE***  
***FC2\_HUE***  
***FC2\_SATURATION***  
***FC2\_GAMMA***  
***FC2\_IRIS***  
***FC2\_FOCUS***  
***FC2\_ZOOM***  
***FC2\_PAN***  
***FC2\_TILT***  
***FC2\_SHUTTER***  
***FC2\_GAIN***  
***FC2\_TRIGGER\_MODE***  
***FC2\_TRIGGER\_DELAY***  
***FC2\_FRAME\_RATE***  
***FC2\_TEMPERATURE***  
***FC2\_UNSPECIFIED\_PROPERTY\_TYPE***  
***FC2\_PROPERTY\_TYPE\_FORCE\_32BITS***

#### 4.2.3.20 enum fc2StatisticsChannel

Enumerator:

***FC2\_STATISTICS\_GREY***  
***FC2\_STATISTICS\_RED***  
***FC2\_STATISTICS\_GREEN***  
***FC2\_STATISTICS\_BLUE***

***FC2\_STATISTICS\_HUE***  
***FC2\_STATISTICS\_SATURATION***  
***FC2\_STATISTICS\_LIGHTNESS***  
***FC2\_STATISTICS\_FORCE\_32BITS***

#### 4.2.3.21 enum fc2TIFFCompressionMethod

Enumerator:

***FC2\_TIFF\_NONE***  
***FC2\_TIFF\_PACKBITS***  
***FC2\_TIFF\_DEFLATE***  
***FC2\_TIFF\_ADOBE\_DEFLATE***  
***FC2\_TIFF\_CCITTFAX3***  
***FC2\_TIFF\_CCITTFAX4***  
***FC2\_TIFF\_LZW***  
***FC2\_TIFF\_JPEG***

#### 4.2.3.22 enum fc2VideoMode

Enumerator:

***FC2\_VIDEOMODE\_160x120YUV444*** 160x120 YUV444.  
***FC2\_VIDEOMODE\_320x240YUV422*** 320x240 YUV422.  
***FC2\_VIDEOMODE\_640x480YUV411*** 640x480 YUV411.  
***FC2\_VIDEOMODE\_640x480YUV422*** 640x480 YUV422.  
***FC2\_VIDEOMODE\_640x480RGB*** 640x480 24-bit RGB.  
***FC2\_VIDEOMODE\_640x480Y8*** 640x480 8-bit.  
***FC2\_VIDEOMODE\_640x480Y16*** 640x480 16-bit.  
***FC2\_VIDEOMODE\_800x600YUV422*** 800x600 YUV422.  
***FC2\_VIDEOMODE\_800x600RGB*** 800x600 RGB.  
***FC2\_VIDEOMODE\_800x600Y8*** 800x600 8-bit.  
***FC2\_VIDEOMODE\_800x600Y16*** 800x600 16-bit.  
***FC2\_VIDEOMODE\_1024x768YUV422*** 1024x768 YUV422.  
***FC2\_VIDEOMODE\_1024x768RGB*** 1024x768 RGB.  
***FC2\_VIDEOMODE\_1024x768Y8*** 1024x768 8-bit.  
***FC2\_VIDEOMODE\_1024x768Y16*** 1024x768 16-bit.  
***FC2\_VIDEOMODE\_1280x960YUV422*** 1280x960 YUV422.  
***FC2\_VIDEOMODE\_1280x960RGB*** 1280x960 RGB.  
***FC2\_VIDEOMODE\_1280x960Y8*** 1280x960 8-bit.

**FC2\_VIDEOMODE\_1280x960Y16** 1280x960 16-bit.  
**FC2\_VIDEOMODE\_1600x1200YUV422** 1600x1200 YUV422.  
**FC2\_VIDEOMODE\_1600x1200RGB** 1600x1200 RGB.  
**FC2\_VIDEOMODE\_1600x1200Y8** 1600x1200 8-bit.  
**FC2\_VIDEOMODE\_1600x1200Y16** 1600x1200 16-bit.  
**FC2\_VIDEOMODE\_FORMAT7** Custom video mode for Format7 functionality.  
**FC2\_NUM\_VIDEOMODES** Number of possible video modes.  
**FC2\_VIDEOMODE\_FORCE\_32BITS**

### 4.3 FlyCapture2GUI\_C.h File Reference

#### Functions

- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2CreateGUIContext](#) ([fc2GuiContext](#) \*pContext)  
*Create a GUI context.*
- FLYCAPTURE2\_C\_API [fc2Error](#) [fc2DestroyGUIContext](#) ([fc2GuiContext](#) context)  
*Destroy a GUI context.*
- FLYCAPTURE2\_C\_API void [fc2GUIConnect](#) ([fc2GuiContext](#) context, [fc2Context](#) cameraContext)  
*Connect GUI context to a camera context.*
- FLYCAPTURE2\_C\_API void [fc2Disonnect](#) ([fc2GuiContext](#) context)  
*Disconnect GUI context from camera.*
- FLYCAPTURE2\_C\_API void [fc2Show](#) ([fc2GuiContext](#) context)  
*Show the GUI.*
- FLYCAPTURE2\_C\_API void [fc2Hide](#) ([fc2GuiContext](#) context)  
*Hide the GUI.*
- FLYCAPTURE2\_C\_API [BOOL](#) [fc2IsVisible](#) ([fc2GuiContext](#) context)  
*Check if the GUI is visible.*
- FLYCAPTURE2\_C\_API void [fc2ShowModal](#) ([fc2GuiContext](#) context, [BOOL](#) \*pOkSelected, [fc2PGRGuid](#) \*guidArray, unsigned int \*size)  
*Show the camera selection dialog.*

#### 4.3.1 Function Documentation

##### 4.3.1.1 FLYCAPTURE2\_C\_API [fc2Error](#) [fc2CreateGUIContext](#) ( [fc2GuiContext](#) \* *pContext* )

Create a GUI context.

#### Parameters

<i>pContext</i>	Pointer to context to be created.
-----------------	-----------------------------------

**Returns**

An Error indicating the success or failure of the function.

**4.3.1.2 FLYCAPTURE2\_C\_API fc2Error fc2DestroyGUIContext ( fc2GuiContext context )**

Destroy a GUI context.

**Parameters**

<i>context</i>	Context to be destroyed.
----------------	--------------------------

**Returns**

An Error indicating the success or failure of the function.

**4.3.1.3 FLYCAPTURE2\_C\_API void fc2Disonnect ( fc2GuiContext context )**

Disconnect GUI context from camera.

**Parameters**

<i>context</i>	GUI context to disconnect.
----------------	----------------------------

**Returns**

An Error indicating the success or failure of the function.

**4.3.1.4 FLYCAPTURE2\_C\_API void fc2GUIConnect ( fc2GuiContext context, fc2Context cameraContext )**

Connect GUI context to a camera context.

**Parameters**

<i>context</i>	GUI context to connect.
<i>camera-Context</i>	Camera context to connect.

**Returns**

An Error indicating the success or failure of the function.

**4.3.1.5 FLYCAPTURE2\_C\_API void fc2Hide ( fc2GuiContext context )**

Hide the GUI.

## Parameters

<i>context</i>	Pointer to context to hide.
----------------	-----------------------------

## Returns

An Error indicating the success or failure of the function.

4.3.1.6 FLYCAPTURE2.C\_API **BOOL** fc2IsVisible ( **fc2GuiContext** *context* )

Check if the GUI is visible.

## Parameters

<i>context</i>	Pointer to context to show.
----------------	-----------------------------

## Returns

Whether the GUI is visible.

4.3.1.7 FLYCAPTURE2.C\_API **void** fc2Show ( **fc2GuiContext** *context* )

Show the GUI.

## Parameters

<i>context</i>	Pointer to context to show.
----------------	-----------------------------

## Returns

An Error indicating the success or failure of the function.

4.3.1.8 FLYCAPTURE2.C\_API **void** fc2ShowModal ( **fc2GuiContext** *context*, **BOOL** \* *pOkSelected*, **fc2PGRGuid** \* *guidArray*, **unsigned int** \* *size* )

Show the camera selection dialog.

## Parameters

<i>context</i>	Pointer to context to show.
<i>pOkSelected</i>	Whether Ok (true) or Cancel (false) was clicked.
<i>guidArray</i>	Array of PGRGuids containing the selected cameras.
<i>size</i>	Size of PGRGuid array.

## 4.4 FlyCapture2Internal\_C.h File Reference

### Data Structures

- struct [fc2InternalContext](#)
- struct [fc2InternalGuiContext](#)
- struct [fc2InternalImageCallback](#)

### Functions

- bool [IsContextValid](#) ([fc2Context](#) context)
- bool [IsGuiContextValid](#) ([fc2GuiContext](#) context)
- void [SyncCpplImageToStruct](#) ([fc2Image](#) \*pImage)

#### 4.4.1 Function Documentation

4.4.1.1 bool [IsContextValid](#) ( [fc2Context](#) context ) [inline]

4.4.1.2 bool [IsGuiContextValid](#) ( [fc2GuiContext](#) context ) [inline]

4.4.1.3 void [SyncCpplImageToStruct](#) ( [fc2Image](#) \*pImage ) [inline]

## 4.5 FlyCapture2Platform\_C.h File Reference

### Defines

- #define [FLYCAPTURE2\\_C\\_API](#)
- #define [FLYCAPTURE2\\_C\\_CALL\\_CONVEN](#)

#### 4.5.1 Define Documentation

4.5.1.1 #define [FLYCAPTURE2\\_C\\_API](#)

4.5.1.2 #define [FLYCAPTURE2\\_C\\_CALL\\_CONVEN](#)

## 4.6 MultiSyncLibrary\_C.h File Reference

### Functions

- MULTISYNCLIBRARY\_C\_API [syncError](#) [syncCreateContext](#) ([syncContext](#) \*pContext)  
*Create a Sync context for MultiSync Library.*
- MULTISYNCLIBRARY\_C\_API [syncError](#) [syncDestroyContext](#) ([syncContext](#) context)

*Destory the sync context.*

- MULTISYNCLIBRARY\_C\_API [syncError syncStart](#) ([syncContext](#) context)

*Start the sync progress.*

- MULTISYNCLIBRARY\_C\_API [syncError syncStop](#) ([syncContext](#) context)

*Stop the sync progress.*

- MULTISYNCLIBRARY\_C\_API [syncError syncRescanMasterTimingBus](#) ([syncContext](#) context)

*Scan newly connected or removed timing bus (for corss-PC syncing only)*

- MULTISYNCLIBRARY\_C\_API [syncMessage syncGetStatus](#) ([syncContext](#) context)

*Start the sync progress.*

- MULTISYNCLIBRARY\_C\_API double [syncGetTimeSinceSynced](#) ([syncContext](#) context)

*Time since sync started.*

- MULTISYNCLIBRARY\_C\_API bool [syncIsTimingBusConnected](#) ([syncContext](#) context)

*Whether syncing across PCs.*

- MULTISYNCLIBRARY\_C\_API bool [syncEnableCrossPCsSynchronization](#) ([syncContext](#) context)

*Enable across pc synchronization support.*

- MULTISYNCLIBRARY\_C\_API bool [syncDisableCrossPCsSynchronization](#) ([syncContext](#) context)

*Disable across pc synchronization support.*

- MULTISYNCLIBRARY\_C\_API bool [syncQueryCrossPCsSynchronizationSetting](#) ([syncContext](#) context)

*Query cross pc synchronizaion support status.*

#### 4.6.1 Function Documentation

##### 4.6.1.1 MULTISYNCLIBRARY\_C\_API [syncError syncCreateContext](#) ( [syncContext](#) \* [pContext](#) )

Create a Sync context for MultiSync Library.

This call must be made before any other calls that use a context will succeed.

##### Parameters

<a href="#">pContext</a>	A pointer to the <a href="#">syncContext</a> to be created.
--------------------------	---

##### Returns

A [syncError](#) indicating the success or failure of the function.



#### 4.6.1.2 MULTISYNCLIBRARY\_C\_API syncError syncDestroyContext ( syncContext context )

Destory the sync context.

This must be called when the user is finished with the context in order to prevent memory leaks.

##### Parameters

<i>context</i>	The syncContext to be destroyed.
----------------	----------------------------------

##### Returns

A syncError indicating the success or failure of the function.

#### 4.6.1.3 MULTISYNCLIBRARY\_C\_API bool syncDisableCrossPCSynchronization ( syncContext context )

Disable across pc synchronization support.

##### Parameters

<i>context</i>	The syncContext to be used.
----------------	-----------------------------

##### Returns

True if operation was successful

#### 4.6.1.4 MULTISYNCLIBRARY\_C\_API bool syncEnableCrossPCSynchronization ( syncContext context )

Enable across pc synchronization support.

##### Parameters

<i>context</i>	The syncContext to be used.
----------------	-----------------------------

##### Returns

True if operation was successful

#### 4.6.1.5 MULTISYNCLIBRARY\_C\_API syncMessage syncGetStatus ( syncContext context )

Start the sync progress.

**Parameters**

<i>context</i>	The syncContext to be used.
----------------	-----------------------------

**Returns**

A syncMessage indicating the sync status.

**4.6.1.6 MULTISYNCLIBRARY\_C\_API double syncGetTimeSinceSynced ( syncContext context )**

Time since sync started.

**Parameters**

<i>context</i>	The syncContext to be used.
----------------	-----------------------------

**Returns**

Time since sync started.

**4.6.1.7 MULTISYNCLIBRARY\_C\_API bool syncIsTimingBusConnected ( syncContext context )**

Whether syncing across PCs.

**Parameters**

<i>context</i>	The syncContext to be used.
----------------	-----------------------------

**Returns**

True if its syncing across PC

**4.6.1.8 MULTISYNCLIBRARY\_C\_API bool syncQueryCrossPCSynchronizationSetting ( syncContext context )**

Query cross pc synchronizaion support status.

**Parameters**

<i>context</i>	The syncContext to be used.
----------------	-----------------------------

**Returns**

True if cross pc synchronization was supported

**4.6.1.9 MULTISYNCLIBRARY\_C\_API syncError syncRescanMasterTimingBus ( syncContext context )**

Scan newly connected or removed timing bus (for corss-PC syncing only)

**Parameters**

<i>context</i>	The syncContext to be used.
----------------	-----------------------------

**Returns**

A syncError indicating the success or failure of the function.

**4.6.1.10 MULTISYNCLIBRARY\_C\_API syncError syncStart ( syncContext context )**

Start the sync progress.

**Parameters**

<i>context</i>	The syncContext to be used.
----------------	-----------------------------

**Returns**

A syncError indicating the success or failure of the function.

**4.6.1.11 MULTISYNCLIBRARY\_C\_API syncError syncStop ( syncContext context )**

Stop the sync progress.

**Parameters**

<i>context</i>	The syncContext to be used.
----------------	-----------------------------

**Returns**

A syncError indicating the success or failure of the function.

## 4.7 MultiSyncLibraryDefs\_C.h File Reference

## Defines

- `#define FALSE 0`
- `#define TRUE 1`
- `#define FULL_32BIT_VALUE 0x7FFFFFFF`
- `#define MAX_STRING_LENGTH 512`

## Typedefs

- `typedef int BOOL`
- `typedef void * syncContext`  
*A context to the MultiSync C library.*

## Enumerations

- `enum syncError { SYNC_ERROR_OK = 0, SYNC_ERROR_FAILED, SYNC_ERROR_ALREADY_STARTED, SYNC_ERROR_ALREADY_STOPPED, SYNC_ERROR_CONTEXT_NOT_INITIALIZED, SYNC_ERROR_UNKNOWN_ERROR }`
- `enum syncMessage { SYNC_MESSAGE_OK = 0, SYNC_MESSAGE_FAILED, SYNC_MESSAGE_STARTED, SYNC_MESSAGE_STOPPED, SYNC_MESSAGE_SYNCING, SYNC_MESSAGE_NOMASTER, SYNC_MESSAGE_THREAD_ERROR, SYNC_MESSAGE_DEVICE_ERROR, SYNC_MESSAGE_NOT_ENOUGH_DEVICES, SYNC_MESSAGE_BUS_RESET, SYNC_MESSAGE_NOT_INITIALIZED, SYNC_MESSAGE_UNKNOWN_ERROR }`

### 4.7.1 Define Documentation

4.7.1.1 `#define FALSE 0`

4.7.1.2 `#define FULL_32BIT_VALUE 0x7FFFFFFF`

4.7.1.3 `#define MAX_STRING_LENGTH 512`

4.7.1.4 `#define TRUE 1`

### 4.7.2 Typedef Documentation

4.7.2.1 `typedef int BOOL`

4.7.2.2 `typedef void* syncContext`

A context to the MultiSync C library.

It must be created before performing any calls to the library.

### 4.7.3 Enumeration Type Documentation

#### 4.7.3.1 enum syncError

Enumerator:

***SYNC\_ERROR\_OK***  
***SYNC\_ERROR\_FAILED***  
***SYNC\_ERROR\_ALREADY\_STARTED***  
***SYNC\_ERROR\_ALREADY\_STOPPED***  
***SYNC\_ERROR\_CONTEXT\_NOT\_INITIALIZED***  
***SYNC\_ERROR\_UNKNOWN\_ERROR***

#### 4.7.3.2 enum syncMessage

Enumerator:

***SYNC\_MESSAGE\_OK***  
***SYNC\_MESSAGE\_FAILED***  
***SYNC\_MESSAGE\_STARTED***  
***SYNC\_MESSAGE\_STOPPED***  
***SYNC\_MESSAGE\_SYNCING***  
***SYNC\_MESSAGE\_NOMASTER***  
***SYNC\_MESSAGE\_THREAD\_ERROR***  
***SYNC\_MESSAGE\_DEVICE\_ERROR***  
***SYNC\_MESSAGE\_NOT\_ENOUGH\_DEVICES***  
***SYNC\_MESSAGE\_BUS\_RESET***  
***SYNC\_MESSAGE\_NOT\_INITIALIZED***  
***SYNC\_MESSAGE\_UNKNOWN\_ERROR***

## 4.8 MultiSyncLibraryPlatform\_C.h File Reference

### Defines

- #define [MULTISYNCLIBRARY\\_C\\_API](#)
- #define [MULTISYNCLIBRARY\\_C\\_CALL\\_CONVEN](#)

### 4.8.1 Define Documentation

#### 4.8.1.1 #define MULTISYNCLIBRARY\_C\_API

#### 4.8.1.2 #define MULTISYNCLIBRARY\_C\_CALL\_CONVEN

# Index

FC2\_ARRIVAL  
FlyCapture2Defs\_C.h, [95](#)

FC2\_AUTO\_EXPOSURE  
FlyCapture2Defs\_C.h, [102](#)

FC2\_BANDWIDTH\_ALLOCATION\_FORCE\_32BITS  
FlyCapture2Defs\_C.h, [94](#)

FC2\_BANDWIDTH\_ALLOCATION\_OFF  
FlyCapture2Defs\_C.h, [94](#)

FC2\_BANDWIDTH\_ALLOCATION\_ON  
FlyCapture2Defs\_C.h, [94](#)

FC2\_BANDWIDTH\_ALLOCATION\_UNSPECIFIED  
FlyCapture2Defs\_C.h, [94](#)

FC2\_BANDWIDTH\_ALLOCATION\_UNSUPPORTED  
FlyCapture2Defs\_C.h, [94](#)

FC2\_BMP  
FlyCapture2Defs\_C.h, [99](#)

FC2\_BRIGHTNESS  
FlyCapture2Defs\_C.h, [102](#)

FC2\_BT\_BGGR  
FlyCapture2Defs\_C.h, [95](#)

FC2\_BT\_FORCE\_32BITS  
FlyCapture2Defs\_C.h, [95](#)

FC2\_BT\_GBRG  
FlyCapture2Defs\_C.h, [95](#)

FC2\_BT\_GRBG  
FlyCapture2Defs\_C.h, [95](#)

FC2\_BT\_NONE  
FlyCapture2Defs\_C.h, [95](#)

FC2\_BT\_RGGB  
FlyCapture2Defs\_C.h, [95](#)

FC2\_BUFFER\_FRAMES  
FlyCapture2Defs\_C.h, [99](#)

FC2\_BUSSPEED\_10000BASE\_T  
FlyCapture2Defs\_C.h, [95](#)

FC2\_BUSSPEED\_1000BASE\_T  
FlyCapture2Defs\_C.h, [95](#)

FC2\_BUSSPEED\_100BASE\_T  
FlyCapture2Defs\_C.h, [95](#)

FC2\_BUSSPEED\_10BASE\_T  
FlyCapture2Defs\_C.h, [95](#)

FC2\_BUSSPEED\_ANY  
FlyCapture2Defs\_C.h, [95](#)

FC2\_BUSSPEED\_FORCE\_32BITS  
FlyCapture2Defs\_C.h, [95](#)

FC2\_BUSSPEED\_S100  
FlyCapture2Defs\_C.h, [95](#)

FC2\_BUSSPEED\_S1600  
FlyCapture2Defs\_C.h, [95](#)

FC2\_BUSSPEED\_S200  
FlyCapture2Defs\_C.h, [95](#)

FC2\_BUSSPEED\_S3200  
FlyCapture2Defs\_C.h, [95](#)

FC2\_BUSSPEED\_S400  
FlyCapture2Defs\_C.h, [95](#)

FC2\_BUSSPEED\_S480  
FlyCapture2Defs\_C.h, [95](#)

FC2\_BUSSPEED\_S5000  
FlyCapture2Defs\_C.h, [95](#)

FC2\_BUSSPEED\_S800  
FlyCapture2Defs\_C.h, [95](#)

FC2\_BUSSPEED\_SPEED\_UNKNOWN  
FlyCapture2Defs\_C.h, [95](#)

FC2\_BUSSPEED\_S\_FASTEST  
FlyCapture2Defs\_C.h, [95](#)

FC2\_BUS\_RESET  
FlyCapture2Defs\_C.h, [95](#)

FC2\_BYTE\_ORDER\_BIG\_ENDIAN  
FlyCapture2Defs\_C.h, [96](#)

FC2\_BYTE\_ORDER\_FORCE\_32BITS  
FlyCapture2Defs\_C.h, [96](#)

FC2\_BYTE\_ORDER\_LITTLE\_ENDIAN  
FlyCapture2Defs\_C.h, [96](#)

FC2\_CALLBACK\_TYPE\_FORCE\_32BITS  
FlyCapture2Defs\_C.h, [95](#)

FC2\_COLOR\_PROCESSING\_ALGORITHM\_FORCE\_32BITS  
FlyCapture2Defs\_C.h, [96](#)

FC2\_DEFAULT

- FlyCapture2Defs\_C.h, [96](#)
- FC2\_DIRECTIONAL
  - FlyCapture2Defs\_C.h, [96](#)
- FC2\_DRIVER\_1394\_CAM
  - FlyCapture2Defs\_C.h, [96](#)
- FC2\_DRIVER\_1394\_JUJU
  - FlyCapture2Defs\_C.h, [96](#)
- FC2\_DRIVER\_1394\_PRO
  - FlyCapture2Defs\_C.h, [96](#)
- FC2\_DRIVER\_1394\_RAW1394
  - FlyCapture2Defs\_C.h, [96](#)
- FC2\_DRIVER\_1394\_VIDEO1394
  - FlyCapture2Defs\_C.h, [96](#)
- FC2\_DRIVER\_FORCE\_32BITS
  - FlyCapture2Defs\_C.h, [96](#)
- FC2\_DRIVER\_GIGE\_FILTER
  - FlyCapture2Defs\_C.h, [96](#)
- FC2\_DRIVER\_GIGE\_NONE
  - FlyCapture2Defs\_C.h, [96](#)
- FC2\_DRIVER\_GIGE\_PRO
  - FlyCapture2Defs\_C.h, [96](#)
- FC2\_DRIVER\_UNKNOWN
  - FlyCapture2Defs\_C.h, [96](#)
- FC2\_DRIVER\_USB3\_PRO
  - FlyCapture2Defs\_C.h, [96](#)
- FC2\_DRIVER\_USB\_CAM
  - FlyCapture2Defs\_C.h, [96](#)
- FC2\_DRIVER\_USB\_NONE
  - FlyCapture2Defs\_C.h, [96](#)
- FC2\_DROP\_FRAMES
  - FlyCapture2Defs\_C.h, [99](#)
- FC2\_EDGE\_SENSING
  - FlyCapture2Defs\_C.h, [96](#)
- FC2\_ERROR\_BUFFER\_TOO\_SMALL
  - FlyCapture2Defs\_C.h, [98](#)
- FC2\_ERROR\_BUS\_MASTER\_FAILED
  - FlyCapture2Defs\_C.h, [97](#)
- FC2\_ERROR\_FAILED
  - FlyCapture2Defs\_C.h, [97](#)
- FC2\_ERROR\_FAILED\_BUS\_MASTER\_CONNECTION
  - FlyCapture2Defs\_C.h, [97](#)
- FC2\_ERROR\_FAILED\_GUID
  - FlyCapture2Defs\_C.h, [97](#)
- FC2\_ERROR\_FORCE\_32BITS
  - FlyCapture2Defs\_C.h, [98](#)
- FC2\_ERROR\_IIDC\_FAILED
  - FlyCapture2Defs\_C.h, [97](#)
- FC2\_ERROR\_IMAGE\_CONSISTENCY\_ERROR
  - FlyCapture2Defs\_C.h, [96](#)
- FlyCapture2Defs\_C.h, [98](#)
- FC2\_ERROR\_IMAGE\_CONVERSION\_FAILED
  - FlyCapture2Defs\_C.h, [98](#)
- FC2\_ERROR\_IMAGE\_LIBRARY\_FAILURE
  - FlyCapture2Defs\_C.h, [98](#)
- FC2\_ERROR\_INIT\_FAILED
  - FlyCapture2Defs\_C.h, [97](#)
- FC2\_ERROR\_INVALID\_BUS\_MANAGER
  - FlyCapture2Defs\_C.h, [97](#)
- FC2\_ERROR\_INVALID\_GENERATION
  - FlyCapture2Defs\_C.h, [97](#)
- FC2\_ERROR\_INVALID\_MODE
  - FlyCapture2Defs\_C.h, [97](#)
- FC2\_ERROR\_INVALID\_PACKET\_SIZE
  - FlyCapture2Defs\_C.h, [97](#)
- FC2\_ERROR\_INVALID\_PARAMETER
  - FlyCapture2Defs\_C.h, [97](#)
- FC2\_ERROR\_INVALID\_SETTINGS
  - FlyCapture2Defs\_C.h, [97](#)
- FC2\_ERROR\_ISOCH\_ALREADY\_STARTED
  - FlyCapture2Defs\_C.h, [97](#)
- FC2\_ERROR\_ISOCH\_BANDWIDTH\_EXCEEDED
  - FlyCapture2Defs\_C.h, [98](#)
- FC2\_ERROR\_ISOCH\_FAILED
  - FlyCapture2Defs\_C.h, [97](#)
- FC2\_ERROR\_ISOCH\_NOT\_STARTED
  - FlyCapture2Defs\_C.h, [97](#)
- FC2\_ERROR\_ISOCH\_RETRIEVE\_BUFFER\_FAILED
  - FlyCapture2Defs\_C.h, [98](#)
- FC2\_ERROR\_ISOCH\_START\_FAILED
  - FlyCapture2Defs\_C.h, [97](#)
- FC2\_ERROR\_ISOCH\_STOP\_FAILED
  - FlyCapture2Defs\_C.h, [98](#)
- FC2\_ERROR\_ISOCH\_SYNC\_FAILED
  - FlyCapture2Defs\_C.h, [98](#)
- FC2\_ERROR\_LOW\_LEVEL\_FAILURE
  - FlyCapture2Defs\_C.h, [97](#)
- FC2\_ERROR\_LUT\_FAILED
  - FlyCapture2Defs\_C.h, [97](#)
- FC2\_ERROR\_MEMORY\_ALLOCATION\_FAILED
  - FlyCapture2Defs\_C.h, [97](#)
- FC2\_ERROR\_NOT\_CONNECTED
  - FlyCapture2Defs\_C.h, [97](#)

- FC2\_ERROR\_NOT\_FOUND  
FlyCapture2Defs\_C.h, [97](#)
- FC2\_ERROR\_NOT\_IMPLEMENTED  
FlyCapture2Defs\_C.h, [97](#)
- FC2\_ERROR\_NOT\_INITIALIZED  
FlyCapture2Defs\_C.h, [97](#)
- FC2\_ERROR\_NOT\_IN\_FORMAT7  
FlyCapture2Defs\_C.h, [97](#)
- FC2\_ERROR\_NOT\_SUPPORTED  
FlyCapture2Defs\_C.h, [97](#)
- FC2\_ERROR\_OK  
FlyCapture2Defs\_C.h, [97](#)
- FC2\_ERROR\_PROPERTY\_FAILED  
FlyCapture2Defs\_C.h, [97](#)
- FC2\_ERROR\_PROPERTY\_NOT\_PRESENT  
FlyCapture2Defs\_C.h, [97](#)
- FC2\_ERROR\_READ\_REGISTER\_FAILED  
FlyCapture2Defs\_C.h, [97](#)
- FC2\_ERROR\_REGISTER\_FAILED  
FlyCapture2Defs\_C.h, [97](#)
- FC2\_ERROR\_STROBE\_FAILED  
FlyCapture2Defs\_C.h, [97](#)
- FC2\_ERROR\_TIMEOUT  
FlyCapture2Defs\_C.h, [97](#)
- FC2\_ERROR\_TRIGGER\_FAILED  
FlyCapture2Defs\_C.h, [97](#)
- FC2\_ERROR\_UNDEFINED  
FlyCapture2Defs\_C.h, [97](#)
- FC2\_ERROR\_WRITE\_REGISTER\_FAILED  
FlyCapture2Defs\_C.h, [97](#)
- FC2\_FOCUS  
FlyCapture2Defs\_C.h, [102](#)
- FC2\_FRAMERATE\_120  
FlyCapture2Defs\_C.h, [98](#)
- FC2\_FRAMERATE\_15  
FlyCapture2Defs\_C.h, [98](#)
- FC2\_FRAMERATE\_1\_875  
FlyCapture2Defs\_C.h, [98](#)
- FC2\_FRAMERATE\_240  
FlyCapture2Defs\_C.h, [98](#)
- FC2\_FRAMERATE\_30  
FlyCapture2Defs\_C.h, [98](#)
- FC2\_FRAMERATE\_3\_75  
FlyCapture2Defs\_C.h, [98](#)
- FC2\_FRAMERATE\_60  
FlyCapture2Defs\_C.h, [98](#)
- FC2\_FRAMERATE\_7\_5  
FlyCapture2Defs\_C.h, [98](#)
- FC2\_FRAMERATE\_FORCE\_32BITS  
FlyCapture2Defs\_C.h, [98](#)
- FC2\_FRAMERATE\_FORMAT7  
FlyCapture2Defs\_C.h, [98](#)
- FC2\_FRAME\_RATE  
FlyCapture2Defs\_C.h, [102](#)
- FC2\_FROM\_FILE\_EXT  
FlyCapture2Defs\_C.h, [99](#)
- FC2\_GAIN  
FlyCapture2Defs\_C.h, [102](#)
- FC2\_GAMMA  
FlyCapture2Defs\_C.h, [102](#)
- FC2\_GRAB\_MODE\_FORCE\_32BITS  
FlyCapture2Defs\_C.h, [99](#)
- FC2\_GRAB\_TIMEOUT\_FORCE\_32BITS  
FlyCapture2Defs\_C.h, [99](#)
- FC2\_HEARTBEAT  
FlyCapture2Defs\_C.h, [98](#)
- FC2\_HEARTBEAT\_TIMEOUT  
FlyCapture2Defs\_C.h, [98](#)
- FC2\_HQ\_LINEAR  
FlyCapture2Defs\_C.h, [96](#)
- FC2\_HUE  
FlyCapture2Defs\_C.h, [102](#)
- FC2\_IMAGE\_FILE\_FORMAT\_FORCE\_32BITS  
FlyCapture2Defs\_C.h, [99](#)
- FC2\_INTERFACE\_GIGE  
FlyCapture2Defs\_C.h, [99](#)
- FC2\_INTERFACE\_IEEE1394  
FlyCapture2Defs\_C.h, [99](#)
- FC2\_INTERFACE\_TYPE\_FORCE\_32BITS  
FlyCapture2Defs\_C.h, [99](#)
- FC2\_INTERFACE\_UNKNOWN  
FlyCapture2Defs\_C.h, [99](#)
- FC2\_INTERFACE\_USB\_2  
FlyCapture2Defs\_C.h, [99](#)
- FC2\_INTERFACE\_USB\_3  
FlyCapture2Defs\_C.h, [99](#)
- FC2\_IPP  
FlyCapture2Defs\_C.h, [96](#)
- FC2\_IRIS  
FlyCapture2Defs\_C.h, [102](#)
- FC2\_JPEG  
FlyCapture2Defs\_C.h, [99](#)
- FC2\_JPEG2000  
FlyCapture2Defs\_C.h, [99](#)
- FC2\_LINUX\_X64



- FlyCapture2Defs\_C.h, [101](#)
- FC2\_LINUX\_X86
  - FlyCapture2Defs\_C.h, [101](#)
- FC2\_MAC
  - FlyCapture2Defs\_C.h, [101](#)
- FC2\_MODE\_0
  - FlyCapture2Defs\_C.h, [100](#)
- FC2\_MODE\_1
  - FlyCapture2Defs\_C.h, [100](#)
- FC2\_MODE\_10
  - FlyCapture2Defs\_C.h, [100](#)
- FC2\_MODE\_11
  - FlyCapture2Defs\_C.h, [100](#)
- FC2\_MODE\_12
  - FlyCapture2Defs\_C.h, [100](#)
- FC2\_MODE\_13
  - FlyCapture2Defs\_C.h, [100](#)
- FC2\_MODE\_14
  - FlyCapture2Defs\_C.h, [100](#)
- FC2\_MODE\_15
  - FlyCapture2Defs\_C.h, [100](#)
- FC2\_MODE\_16
  - FlyCapture2Defs\_C.h, [100](#)
- FC2\_MODE\_17
  - FlyCapture2Defs\_C.h, [100](#)
- FC2\_MODE\_18
  - FlyCapture2Defs\_C.h, [100](#)
- FC2\_MODE\_19
  - FlyCapture2Defs\_C.h, [100](#)
- FC2\_MODE\_2
  - FlyCapture2Defs\_C.h, [100](#)
- FC2\_MODE\_20
  - FlyCapture2Defs\_C.h, [100](#)
- FC2\_MODE\_21
  - FlyCapture2Defs\_C.h, [100](#)
- FC2\_MODE\_22
  - FlyCapture2Defs\_C.h, [100](#)
- FC2\_MODE\_23
  - FlyCapture2Defs\_C.h, [100](#)
- FC2\_MODE\_24
  - FlyCapture2Defs\_C.h, [100](#)
- FC2\_MODE\_25
  - FlyCapture2Defs\_C.h, [100](#)
- FC2\_MODE\_26
  - FlyCapture2Defs\_C.h, [100](#)
- FC2\_MODE\_27
  - FlyCapture2Defs\_C.h, [100](#)
- FC2\_MODE\_28
  - FlyCapture2Defs\_C.h, [100](#)
- FC2\_MODE\_29
  - FlyCapture2Defs\_C.h, [100](#)
- FlyCapture2Defs\_C.h, [100](#)
- FC2\_MODE\_3
  - FlyCapture2Defs\_C.h, [100](#)
- FC2\_MODE\_30
  - FlyCapture2Defs\_C.h, [100](#)
- FC2\_MODE\_31
  - FlyCapture2Defs\_C.h, [100](#)
- FC2\_MODE\_4
  - FlyCapture2Defs\_C.h, [100](#)
- FC2\_MODE\_5
  - FlyCapture2Defs\_C.h, [100](#)
- FC2\_MODE\_6
  - FlyCapture2Defs\_C.h, [100](#)
- FC2\_MODE\_7
  - FlyCapture2Defs\_C.h, [100](#)
- FC2\_MODE\_8
  - FlyCapture2Defs\_C.h, [100](#)
- FC2\_MODE\_9
  - FlyCapture2Defs\_C.h, [100](#)
- FC2\_MODE\_FORCE\_32BITS
  - FlyCapture2Defs\_C.h, [100](#)
- FC2\_NEAREST\_NEIGHBOR\_FAST
  - FlyCapture2Defs\_C.h, [96](#)
- FC2\_NO\_COLOR\_PROCESSING
  - FlyCapture2Defs\_C.h, [96](#)
- FC2\_NUM\_FRAMERATES
  - FlyCapture2Defs\_C.h, [98](#)
- FC2\_NUM\_MODES
  - FlyCapture2Defs\_C.h, [100](#)
- FC2\_NUM\_PIXEL\_FORMATS
  - FlyCapture2Defs\_C.h, [102](#)
- FC2\_NUM\_VIDEOMODES
  - FlyCapture2Defs\_C.h, [104](#)
- FC2\_OSTYPE\_FORCE\_32BITS
  - FlyCapture2Defs\_C.h, [101](#)
- FC2\_PAN
  - FlyCapture2Defs\_C.h, [102](#)
- FC2\_PCIE\_BUSSPEED\_2\_5
  - FlyCapture2Defs\_C.h, [101](#)
- FC2\_PCIE\_BUSSPEED\_5\_0
  - FlyCapture2Defs\_C.h, [101](#)
- FC2\_PCIE\_BUSSPEED\_FORCE\_32BITS
  - FlyCapture2Defs\_C.h, [101](#)
- FC2\_PGM
  - FlyCapture2Defs\_C.h, [99](#)
- FC2\_PIXEL\_FORMAT\_411YUV8
  - FlyCapture2Defs\_C.h, [101](#)

- FC2\_PIXEL\_FORMAT\_422YUV8  
FlyCapture2Defs\_C.h, [101](#)
- FC2\_PIXEL\_FORMAT\_422YUV8\_JPEG  
FlyCapture2Defs\_C.h, [102](#)
- FC2\_PIXEL\_FORMAT\_444YUV8  
FlyCapture2Defs\_C.h, [101](#)
- FC2\_PIXEL\_FORMAT\_BGR  
FlyCapture2Defs\_C.h, [101](#)
- FC2\_PIXEL\_FORMAT\_BGR16  
FlyCapture2Defs\_C.h, [102](#)
- FC2\_PIXEL\_FORMAT\_BGRU  
FlyCapture2Defs\_C.h, [101](#)
- FC2\_PIXEL\_FORMAT\_BGRU16  
FlyCapture2Defs\_C.h, [102](#)
- FC2\_PIXEL\_FORMAT\_MONO12  
FlyCapture2Defs\_C.h, [101](#)
- FC2\_PIXEL\_FORMAT\_MONO16  
FlyCapture2Defs\_C.h, [101](#)
- FC2\_PIXEL\_FORMAT\_MONO8  
FlyCapture2Defs\_C.h, [101](#)
- FC2\_PIXEL\_FORMAT\_RAW12  
FlyCapture2Defs\_C.h, [101](#)
- FC2\_PIXEL\_FORMAT\_RAW16  
FlyCapture2Defs\_C.h, [101](#)
- FC2\_PIXEL\_FORMAT\_RAW8  
FlyCapture2Defs\_C.h, [101](#)
- FC2\_PIXEL\_FORMAT\_RGB  
FlyCapture2Defs\_C.h, [101](#)
- FC2\_PIXEL\_FORMAT\_RGB16  
FlyCapture2Defs\_C.h, [101](#)
- FC2\_PIXEL\_FORMAT\_RGB8  
FlyCapture2Defs\_C.h, [101](#)
- FC2\_PIXEL\_FORMAT\_RGBU  
FlyCapture2Defs\_C.h, [101](#)
- FC2\_PIXEL\_FORMAT\_S\_MONO16  
FlyCapture2Defs\_C.h, [101](#)
- FC2\_PIXEL\_FORMAT\_S\_RGB16  
FlyCapture2Defs\_C.h, [101](#)
- FC2\_PNG  
FlyCapture2Defs\_C.h, [99](#)
- FC2\_PPM  
FlyCapture2Defs\_C.h, [99](#)
- FC2\_PROPERTY\_TYPE\_FORCE\_32BITS  
FlyCapture2Defs\_C.h, [102](#)
- FC2\_RAW  
FlyCapture2Defs\_C.h, [99](#)
- FC2\_REMOVAL  
FlyCapture2Defs\_C.h, [95](#)
- FC2\_RIGOROUS  
FlyCapture2Defs\_C.h, [96](#)
- FC2\_SATURATION  
FlyCapture2Defs\_C.h, [102](#)
- FC2\_SHARPNESS  
FlyCapture2Defs\_C.h, [102](#)
- FC2\_SHUTTER  
FlyCapture2Defs\_C.h, [102](#)
- FC2\_STATISTICS\_BLUE  
FlyCapture2Defs\_C.h, [102](#)
- FC2\_STATISTICS\_FORCE\_32BITS  
FlyCapture2Defs\_C.h, [103](#)
- FC2\_STATISTICS\_GREEN  
FlyCapture2Defs\_C.h, [102](#)
- FC2\_STATISTICS\_GREY  
FlyCapture2Defs\_C.h, [102](#)
- FC2\_STATISTICS\_HUE  
FlyCapture2Defs\_C.h, [102](#)
- FC2\_STATISTICS\_LIGHTNESS  
FlyCapture2Defs\_C.h, [103](#)
- FC2\_STATISTICS\_RED  
FlyCapture2Defs\_C.h, [102](#)
- FC2\_STATISTICS\_SATURATION  
FlyCapture2Defs\_C.h, [103](#)
- FC2\_TEMPERATURE  
FlyCapture2Defs\_C.h, [102](#)
- FC2\_TIFF  
FlyCapture2Defs\_C.h, [99](#)
- FC2\_TIFF\_ADOBE\_DEFLATE  
FlyCapture2Defs\_C.h, [103](#)
- FC2\_TIFF\_CCITTFAX3  
FlyCapture2Defs\_C.h, [103](#)
- FC2\_TIFF\_CCITTFAX4  
FlyCapture2Defs\_C.h, [103](#)
- FC2\_TIFF\_DEFLATE  
FlyCapture2Defs\_C.h, [103](#)
- FC2\_TIFF\_JPEG  
FlyCapture2Defs\_C.h, [103](#)
- FC2\_TIFF\_LZW  
FlyCapture2Defs\_C.h, [103](#)
- FC2\_TIFF\_NONE  
FlyCapture2Defs\_C.h, [103](#)
- FC2\_TIFF\_PACKBITS  
FlyCapture2Defs\_C.h, [103](#)
- FC2\_TILT  
FlyCapture2Defs\_C.h, [102](#)
- FC2\_TIMEOUT\_INFINITE  
FlyCapture2Defs\_C.h, [99](#)
- FC2\_TIMEOUT\_NONE  
FlyCapture2Defs\_C.h, [99](#)
- FC2\_TIMEOUT\_UNSPECIFIED

- FlyCapture2Defs\_C.h, [99](#)
- FC2\_TRIGGER\_DELAY
  - FlyCapture2Defs\_C.h, [102](#)
- FC2\_TRIGGER\_MODE
  - FlyCapture2Defs\_C.h, [102](#)
- FC2\_UNKNOWN\_OS
  - FlyCapture2Defs\_C.h, [101](#)
- FC2\_UNSPECIFIED\_GRAB\_MODE
  - FlyCapture2Defs\_C.h, [99](#)
- FC2\_UNSPECIFIED\_PIXEL\_FORMAT
  - FlyCapture2Defs\_C.h, [102](#)
- FC2\_UNSPECIFIED\_PROPERTY\_TYPE
  - FlyCapture2Defs\_C.h, [102](#)
- FC2\_VIDEOMODE\_1024x768RGB
  - FlyCapture2Defs\_C.h, [103](#)
- FC2\_VIDEOMODE\_1024x768Y16
  - FlyCapture2Defs\_C.h, [103](#)
- FC2\_VIDEOMODE\_1024x768Y8
  - FlyCapture2Defs\_C.h, [103](#)
- FC2\_VIDEOMODE\_1024x768YUV422
  - FlyCapture2Defs\_C.h, [103](#)
- FC2\_VIDEOMODE\_1280x960RGB
  - FlyCapture2Defs\_C.h, [103](#)
- FC2\_VIDEOMODE\_1280x960Y16
  - FlyCapture2Defs\_C.h, [103](#)
- FC2\_VIDEOMODE\_1280x960Y8
  - FlyCapture2Defs\_C.h, [103](#)
- FC2\_VIDEOMODE\_1280x960YUV422
  - FlyCapture2Defs\_C.h, [103](#)
- FC2\_VIDEOMODE\_1600x1200RGB
  - FlyCapture2Defs\_C.h, [104](#)
- FC2\_VIDEOMODE\_1600x1200Y16
  - FlyCapture2Defs\_C.h, [104](#)
- FC2\_VIDEOMODE\_1600x1200Y8
  - FlyCapture2Defs\_C.h, [104](#)
- FC2\_VIDEOMODE\_1600x1200YUV422
  - FlyCapture2Defs\_C.h, [104](#)
- FC2\_VIDEOMODE\_160x120YUV444
  - FlyCapture2Defs\_C.h, [103](#)
- FC2\_VIDEOMODE\_320x240YUV422
  - FlyCapture2Defs\_C.h, [103](#)
- FC2\_VIDEOMODE\_640x480RGB
  - FlyCapture2Defs\_C.h, [103](#)
- FC2\_VIDEOMODE\_640x480Y16
  - FlyCapture2Defs\_C.h, [103](#)
- FC2\_VIDEOMODE\_640x480Y8
  - FlyCapture2Defs\_C.h, [103](#)
- FC2\_VIDEOMODE\_640x480YUV411
  - FlyCapture2Defs\_C.h, [103](#)
- FC2\_VIDEOMODE\_640x480YUV422
  - FlyCapture2Defs\_C.h, [103](#)
- FlyCapture2Defs\_C.h, [103](#)
- FC2\_VIDEOMODE\_800x600RGB
  - FlyCapture2Defs\_C.h, [103](#)
- FC2\_VIDEOMODE\_800x600Y16
  - FlyCapture2Defs\_C.h, [103](#)
- FC2\_VIDEOMODE\_800x600Y8
  - FlyCapture2Defs\_C.h, [103](#)
- FC2\_VIDEOMODE\_800x600YUV422
  - FlyCapture2Defs\_C.h, [103](#)
- FC2\_VIDEOMODE\_FORCE\_32BITS
  - FlyCapture2Defs\_C.h, [104](#)
- FC2\_VIDEOMODE\_FORMAT7
  - FlyCapture2Defs\_C.h, [104](#)
- FC2\_WHITE\_BALANCE
  - FlyCapture2Defs\_C.h, [102](#)
- FC2\_WINDOWS\_X64
  - FlyCapture2Defs\_C.h, [101](#)
- FC2\_WINDOWS\_X86
  - FlyCapture2Defs\_C.h, [101](#)
- FC2\_ZOOM
  - FlyCapture2Defs\_C.h, [102](#)
- FlyCapture2Defs\_C.h
  - FC2\_ARRIVAL, [95](#)
  - FC2\_AUTO\_EXPOSURE, [102](#)
  - FC2\_BANDWIDTH\_ALLOCATION\_  
FORCE\_32BITS, [94](#)
  - FC2\_BANDWIDTH\_ALLOCATION\_  
OFF, [94](#)
  - FC2\_BANDWIDTH\_ALLOCATION\_  
ON, [94](#)
  - FC2\_BANDWIDTH\_ALLOCATION\_  
UNSPECIFIED, [94](#)
  - FC2\_BANDWIDTH\_ALLOCATION\_  
UNSUPPORTED, [94](#)
  - FC2\_BMP, [99](#)
  - FC2\_BRIGHTNESS, [102](#)
  - FC2\_BT\_BGGR, [95](#)
  - FC2\_BT\_FORCE\_32BITS, [95](#)
  - FC2\_BT\_GBRG, [95](#)
  - FC2\_BT\_GRBG, [95](#)
  - FC2\_BT\_NONE, [95](#)
  - FC2\_BT\_RRGB, [95](#)
  - FC2\_BUFFER\_FRAMES, [99](#)
  - FC2\_BUSSPEED\_10000BASE\_T,  
[95](#)
  - FC2\_BUSSPEED\_1000BASE\_T, [95](#)
  - FC2\_BUSSPEED\_100BASE\_T, [95](#)
  - FC2\_BUSSPEED\_10BASE\_T, [95](#)
  - FC2\_BUSSPEED\_ANY, [95](#)

- FC2\_BUSSPEED\_FORCE\_32BITS, [95](#)
- FC2\_BUSSPEED\_S100, [95](#)
- FC2\_BUSSPEED\_S1600, [95](#)
- FC2\_BUSSPEED\_S200, [95](#)
- FC2\_BUSSPEED\_S3200, [95](#)
- FC2\_BUSSPEED\_S400, [95](#)
- FC2\_BUSSPEED\_S480, [95](#)
- FC2\_BUSSPEED\_S5000, [95](#)
- FC2\_BUSSPEED\_S800, [95](#)
- FC2\_BUSSPEED\_SPEED\_UNKNO-  
WN, [95](#)
- FC2\_BUSSPEED\_S\_FASTEST, [95](#)
- FC2\_BUS\_RESET, [95](#)
- FC2\_BYTE\_ORDER\_BIG\_ENDIAN, [96](#)
- FC2\_BYTE\_ORDER\_FORCE\_32BI-  
TS, [96](#)
- FC2\_BYTE\_ORDER\_LITTLE\_ENDI-  
AN, [96](#)
- FC2\_CALLBACK\_TYPE\_FORCE\_-  
32BITS, [95](#)
- FC2\_COLOR\_PROCESSING\_AL-  
GORITHM\_FORCE\_32BITS, [96](#)
- FC2\_DEFAULT, [96](#)
- FC2\_DIRECTIONAL, [96](#)
- FC2\_DRIVER\_1394\_CAM, [96](#)
- FC2\_DRIVER\_1394\_JUJU, [96](#)
- FC2\_DRIVER\_1394\_PRO, [96](#)
- FC2\_DRIVER\_1394\_RAW1394, [96](#)
- FC2\_DRIVER\_1394\_VIDEO1394, [96](#)
- FC2\_DRIVER\_FORCE\_32BITS, [96](#)
- FC2\_DRIVER\_GIGE\_FILTER, [96](#)
- FC2\_DRIVER\_GIGE\_NONE, [96](#)
- FC2\_DRIVER\_GIGE\_PRO, [96](#)
- FC2\_DRIVER\_UNKNOWN, [96](#)
- FC2\_DRIVER\_USB3\_PRO, [96](#)
- FC2\_DRIVER\_USB\_CAM, [96](#)
- FC2\_DRIVER\_USB\_NONE, [96](#)
- FC2\_DROP\_FRAMES, [99](#)
- FC2\_EDGE\_SENSING, [96](#)
- FC2\_ERROR\_BUFFER\_TOO\_SM-  
ALL, [98](#)
- FC2\_ERROR\_BUS\_MASTER\_FAI-  
LED, [97](#)
- FC2\_ERROR\_FAILED, [97](#)
- FC2\_ERROR\_FAILED\_BUS\_MAS-  
TER\_CONNECTION, [97](#)
- FC2\_ERROR\_FAILED\_GUID, [97](#)
- FC2\_ERROR\_FORCE\_32BITS, [98](#)
- FC2\_ERROR\_IIDC\_FAILED, [97](#)
- FC2\_ERROR\_IMAGE\_CONSISTE-  
NCY\_ERROR, [98](#)
- FC2\_ERROR\_IMAGE\_CONVERTI-  
ON\_FAILED, [98](#)
- FC2\_ERROR\_IMAGE\_LIBRARY\_F-  
AILURE, [98](#)
- FC2\_ERROR\_INIT\_FAILED, [97](#)
- FC2\_ERROR\_INVALID\_BUS\_MAN-  
AGER, [97](#)
- FC2\_ERROR\_INVALID\_GENERAT-  
ION, [97](#)
- FC2\_ERROR\_INVALID\_MODE, [97](#)
- FC2\_ERROR\_INVALID\_PACKET\_-  
SIZE, [97](#)
- FC2\_ERROR\_INVALID\_PARAMET-  
ER, [97](#)
- FC2\_ERROR\_INVALID\_SETTINGS, [97](#)
- FC2\_ERROR\_ISOCH\_ALREADY\_-  
STARTED, [97](#)
- FC2\_ERROR\_ISOCH\_BANDWIDT-  
H\_EXCEEDED, [98](#)
- FC2\_ERROR\_ISOCH\_FAILED, [97](#)
- FC2\_ERROR\_ISOCH\_NOT\_STAR-  
TED, [97](#)
- FC2\_ERROR\_ISOCH\_RETRIEVE\_-  
BUFFER\_FAILED, [98](#)
- FC2\_ERROR\_ISOCH\_START\_FAI-  
LED, [97](#)
- FC2\_ERROR\_ISOCH\_STOP\_FAI-  
LED, [98](#)
- FC2\_ERROR\_ISOCH\_SYNC\_FAI-  
LED, [98](#)
- FC2\_ERROR\_LOW\_LEVEL\_FAILO-  
RE, [97](#)
- FC2\_ERROR\_LUT\_FAILED, [97](#)
- FC2\_ERROR\_MEMORY\_ALLOCA-  
TION\_FAILED, [97](#)
- FC2\_ERROR\_NOT\_CONNECTED, [97](#)
- FC2\_ERROR\_NOT\_FOUND, [97](#)
- FC2\_ERROR\_NOT\_IMPLEMENTED, [97](#)
- FC2\_ERROR\_NOT\_INITIALIZED, [97](#)
- FC2\_ERROR\_NOT\_IN\_FORMAT7, [97](#)

- FC2\_ERROR\_NOT\_SUPPORTED, [97](#)
- FC2\_ERROR\_OK, [97](#)
- FC2\_ERROR\_PROPERTY\_FAILED, [97](#)
- FC2\_ERROR\_PROPERTY\_NOT\_P-  
RESENT, [97](#)
- FC2\_ERROR\_READ\_REGISTER\_-  
FAILED, [97](#)
- FC2\_ERROR\_REGISTER\_FAILED,  
[97](#)
- FC2\_ERROR\_STROBE\_FAILED, [97](#)
- FC2\_ERROR\_TIMEOUT, [97](#)
- FC2\_ERROR\_TRIGGER\_FAILED,  
[97](#)
- FC2\_ERROR\_UNDEFINED, [97](#)
- FC2\_ERROR\_WRITE\_REGISTER\_-  
\_FAILED, [97](#)
- FC2\_FOCUS, [102](#)
- FC2\_FRAMERATE\_120, [98](#)
- FC2\_FRAMERATE\_15, [98](#)
- FC2\_FRAMERATE\_1\_875, [98](#)
- FC2\_FRAMERATE\_240, [98](#)
- FC2\_FRAMERATE\_30, [98](#)
- FC2\_FRAMERATE\_3\_75, [98](#)
- FC2\_FRAMERATE\_60, [98](#)
- FC2\_FRAMERATE\_7\_5, [98](#)
- FC2\_FRAMERATE\_FORCE\_32BIT-  
S, [98](#)
- FC2\_FRAMERATE\_FORMAT7, [98](#)
- FC2\_FRAME\_RATE, [102](#)
- FC2\_FROM\_FILE\_EXT, [99](#)
- FC2\_GAIN, [102](#)
- FC2\_GAMMA, [102](#)
- FC2\_GRAB\_MODE\_FORCE\_32BI-  
TS, [99](#)
- FC2\_GRAB\_TIMEOUT\_FORCE\_-  
32BITS, [99](#)
- FC2\_HEARTBEAT, [98](#)
- FC2\_HEARTBEAT\_TIMEOUT, [98](#)
- FC2\_HQ\_LINEAR, [96](#)
- FC2\_HUE, [102](#)
- FC2\_IMAGE\_FILE\_FORMAT\_FOR-  
CE\_32BITS, [99](#)
- FC2\_INTERFACE\_GIGE, [99](#)
- FC2\_INTERFACE\_IEEE1394, [99](#)
- FC2\_INTERFACE\_TYPE\_FORCE\_-  
32BITS, [99](#)
- FC2\_INTERFACE\_UNKNOWN, [99](#)
- FC2\_INTERFACE\_USB\_2, [99](#)
- FC2\_INTERFACE\_USB\_3, [99](#)
- FC2\_IPP, [96](#)
- FC2\_IRIS, [102](#)
- FC2\_JPEG, [99](#)
- FC2\_JPEG2000, [99](#)
- FC2\_LINUX\_X64, [101](#)
- FC2\_LINUX\_X86, [101](#)
- FC2\_MAC, [101](#)
- FC2\_MODE\_0, [100](#)
- FC2\_MODE\_1, [100](#)
- FC2\_MODE\_10, [100](#)
- FC2\_MODE\_11, [100](#)
- FC2\_MODE\_12, [100](#)
- FC2\_MODE\_13, [100](#)
- FC2\_MODE\_14, [100](#)
- FC2\_MODE\_15, [100](#)
- FC2\_MODE\_16, [100](#)
- FC2\_MODE\_17, [100](#)
- FC2\_MODE\_18, [100](#)
- FC2\_MODE\_19, [100](#)
- FC2\_MODE\_2, [100](#)
- FC2\_MODE\_20, [100](#)
- FC2\_MODE\_21, [100](#)
- FC2\_MODE\_22, [100](#)
- FC2\_MODE\_23, [100](#)
- FC2\_MODE\_24, [100](#)
- FC2\_MODE\_25, [100](#)
- FC2\_MODE\_26, [100](#)
- FC2\_MODE\_27, [100](#)
- FC2\_MODE\_28, [100](#)
- FC2\_MODE\_29, [100](#)
- FC2\_MODE\_3, [100](#)
- FC2\_MODE\_30, [100](#)
- FC2\_MODE\_31, [100](#)
- FC2\_MODE\_4, [100](#)
- FC2\_MODE\_5, [100](#)
- FC2\_MODE\_6, [100](#)
- FC2\_MODE\_7, [100](#)
- FC2\_MODE\_8, [100](#)
- FC2\_MODE\_9, [100](#)
- FC2\_MODE\_FORCE\_32BITS, [100](#)
- FC2\_NEAREST\_NEIGHBOR\_FAS-  
T, [96](#)
- FC2\_NO\_COLOR\_PROCESSING,  
[96](#)
- FC2\_NUM\_FRAMERATES, [98](#)
- FC2\_NUM\_MODES, [100](#)
- FC2\_NUM\_PIXEL\_FORMATS, [102](#)
- FC2\_NUM\_VIDEOMODES, [104](#)

- FC2\_OSTYPE\_FORCE\_32BITS, [101](#)
- FC2\_PAN, [102](#)
- FC2\_PCIE\_BUSSPEED\_2\_5, [101](#)
- FC2\_PCIE\_BUSSPEED\_5\_0, [101](#)
- FC2\_PCIE\_BUSSPEED\_FORCE\_32BITS, [101](#)
- FC2\_PCIE\_BUSSPEED\_UNKNOWN, [101](#)
- FC2\_PGM, [99](#)
- FC2\_PIXEL\_FORMAT\_411YUV8, [101](#)
- FC2\_PIXEL\_FORMAT\_422YUV8, [101](#)
- FC2\_PIXEL\_FORMAT\_422YUV8\_JPEG, [102](#)
- FC2\_PIXEL\_FORMAT\_444YUV8, [101](#)
- FC2\_PIXEL\_FORMAT\_BGR, [101](#)
- FC2\_PIXEL\_FORMAT\_BGR16, [102](#)
- FC2\_PIXEL\_FORMAT\_BGRU, [101](#)
- FC2\_PIXEL\_FORMAT\_BGRU16, [102](#)
- FC2\_PIXEL\_FORMAT\_MONO12, [101](#)
- FC2\_PIXEL\_FORMAT\_MONO16, [101](#)
- FC2\_PIXEL\_FORMAT\_MONO8, [101](#)
- FC2\_PIXEL\_FORMAT\_RAW12, [101](#)
- FC2\_PIXEL\_FORMAT\_RAW16, [101](#)
- FC2\_PIXEL\_FORMAT\_RAW8, [101](#)
- FC2\_PIXEL\_FORMAT\_RGB, [101](#)
- FC2\_PIXEL\_FORMAT\_RGB16, [101](#)
- FC2\_PIXEL\_FORMAT\_RGB8, [101](#)
- FC2\_PIXEL\_FORMAT\_RGBU, [101](#)
- FC2\_PIXEL\_FORMAT\_S\_MONO16, [101](#)
- FC2\_PIXEL\_FORMAT\_S\_RGB16, [101](#)
- FC2\_PNG, [99](#)
- FC2\_PPM, [99](#)
- FC2\_PROPERTY\_TYPE\_FORCE\_32BITS, [102](#)
- FC2\_RAW, [99](#)
- FC2\_REMOVAL, [95](#)
- FC2\_RIGOROUS, [96](#)
- FC2\_SATURATION, [102](#)
- FC2\_SHARPNESS, [102](#)
- FC2\_SHUTTER, [102](#)
- FC2\_STATISTICS\_BLUE, [102](#)
- FC2\_STATISTICS\_FORCE\_32BITS, [103](#)
- FC2\_STATISTICS\_GREEN, [102](#)
- FC2\_STATISTICS\_GREY, [102](#)
- FC2\_STATISTICS\_HUE, [102](#)
- FC2\_STATISTICS\_LIGHTNESS, [103](#)
- FC2\_STATISTICS\_RED, [102](#)
- FC2\_STATISTICS\_SATURATION, [103](#)
- FC2\_TEMPERATURE, [102](#)
- FC2\_TIFF, [99](#)
- FC2\_TIFF\_ADOBE\_DEFLATE, [103](#)
- FC2\_TIFF\_CCITTFAX3, [103](#)
- FC2\_TIFF\_CCITTFAX4, [103](#)
- FC2\_TIFF\_DEFLATE, [103](#)
- FC2\_TIFF\_JPEG, [103](#)
- FC2\_TIFF\_LZW, [103](#)
- FC2\_TIFF\_NONE, [103](#)
- FC2\_TIFF\_PACKBITS, [103](#)
- FC2\_TILT, [102](#)
- FC2\_TIMEOUT\_INFINITE, [99](#)
- FC2\_TIMEOUT\_NONE, [99](#)
- FC2\_TIMEOUT\_UNSPECIFIED, [99](#)
- FC2\_TRIGGER\_DELAY, [102](#)
- FC2\_TRIGGER\_MODE, [102](#)
- FC2\_UNKNOWN\_OS, [101](#)
- FC2\_UNSPECIFIED\_GRAB\_MODE, [99](#)
- FC2\_UNSPECIFIED\_PIXEL\_FORMAT, [102](#)
- FC2\_UNSPECIFIED\_PROPERTY\_TYPE, [102](#)
- FC2\_VIDEOMODE\_1024x768RGB, [103](#)
- FC2\_VIDEOMODE\_1024x768Y16, [103](#)
- FC2\_VIDEOMODE\_1024x768Y8, [103](#)
- FC2\_VIDEOMODE\_1024x768YUV422, [103](#)
- FC2\_VIDEOMODE\_1280x960RGB, [103](#)
- FC2\_VIDEOMODE\_1280x960Y16, [103](#)
- FC2\_VIDEOMODE\_1280x960Y8, [103](#)
- FC2\_VIDEOMODE\_1280x960YUV422, [103](#)

- FC2\_VIDEOMODE\_1600x1200RGB, [104](#)
- FC2\_VIDEOMODE\_1600x1200Y16, [104](#)
- FC2\_VIDEOMODE\_1600x1200Y8, [104](#)
- FC2\_VIDEOMODE\_1600x1200YU-V422, [104](#)
- FC2\_VIDEOMODE\_160x120YU-V444, [103](#)
- FC2\_VIDEOMODE\_320x240YU-V422, [103](#)
- FC2\_VIDEOMODE\_640x480RGB, [103](#)
- FC2\_VIDEOMODE\_640x480Y16, [103](#)
- FC2\_VIDEOMODE\_640x480Y8, [103](#)
- FC2\_VIDEOMODE\_640x480YU-V411, [103](#)
- FC2\_VIDEOMODE\_640x480YU-V422, [103](#)
- FC2\_VIDEOMODE\_800x600RGB, [103](#)
- FC2\_VIDEOMODE\_800x600Y16, [103](#)
- FC2\_VIDEOMODE\_800x600Y8, [103](#)
- FC2\_VIDEOMODE\_800x600YU-V422, [103](#)
- FC2\_VIDEOMODE\_FORCE\_32BITS, [104](#)
- FC2\_VIDEOMODE\_FORMAT7, [104](#)
- FC2\_WHITE\_BALANCE, [102](#)
- FC2\_WINDOWS\_X64, [101](#)
- FC2\_WINDOWS\_X86, [101](#)
- FC2\_ZOOM, [102](#)
- MultiSyncLibraryDefs\_C.h
  - SYNC\_ERROR\_ALREADY\_STARTED, [113](#)
  - SYNC\_ERROR\_ALREADY\_STOPPED, [113](#)
  - SYNC\_ERROR\_CONTEXT\_NOT\_INITIALIZED, [113](#)
  - SYNC\_ERROR\_FAILED, [113](#)
  - SYNC\_ERROR\_OK, [113](#)
  - SYNC\_ERROR\_UNKNOWN\_ERROR, [113](#)
  - SYNC\_MESSAGE\_BUS\_RESET, [113](#)
  - SYNC\_MESSAGE\_DEVICE\_ERROR, [113](#)
  - SYNC\_MESSAGE\_FAILED, [113](#)
  - SYNC\_MESSAGE\_NOMASTER, [113](#)
  - SYNC\_MESSAGE\_NOT\_ENOUGH\_DEVICES, [113](#)
  - SYNC\_MESSAGE\_NOT\_INITIALIZED, [113](#)
  - SYNC\_MESSAGE\_OK, [113](#)
  - SYNC\_MESSAGE\_STARTED, [113](#)
  - SYNC\_MESSAGE\_STOPPED, [113](#)
  - SYNC\_MESSAGE\_SYNCING, [113](#)
  - SYNC\_MESSAGE\_THREAD\_ERROR, [113](#)
  - SYNC\_MESSAGE\_UNKNOWN\_ERROR, [113](#)
  - SYNC\_ERROR\_ALREADY\_STARTED MultiSyncLibraryDefs\_C.h, [113](#)
  - SYNC\_ERROR\_ALREADY\_STOPPED MultiSyncLibraryDefs\_C.h, [113](#)
  - SYNC\_ERROR\_CONTEXT\_NOT\_INITIALIZED MultiSyncLibraryDefs\_C.h, [113](#)
  - SYNC\_ERROR\_FAILED MultiSyncLibraryDefs\_C.h, [113](#)
  - SYNC\_ERROR\_OK MultiSyncLibraryDefs\_C.h, [113](#)
  - SYNC\_ERROR\_UNKNOWN\_ERROR MultiSyncLibraryDefs\_C.h, [113](#)
  - SYNC\_MESSAGE\_BUS\_RESET MultiSyncLibraryDefs\_C.h, [113](#)
  - SYNC\_MESSAGE\_DEVICE\_ERROR MultiSyncLibraryDefs\_C.h, [113](#)
  - SYNC\_MESSAGE\_FAILED MultiSyncLibraryDefs\_C.h, [113](#)
  - SYNC\_MESSAGE\_NOMASTER MultiSyncLibraryDefs\_C.h, [113](#)
  - SYNC\_MESSAGE\_NOT\_ENOUGH\_DEVICES MultiSyncLibraryDefs\_C.h, [113](#)
  - SYNC\_MESSAGE\_NOT\_INITIALIZED MultiSyncLibraryDefs\_C.h, [113](#)
  - SYNC\_MESSAGE\_OK MultiSyncLibraryDefs\_C.h, [113](#)
  - SYNC\_MESSAGE\_STARTED MultiSyncLibraryDefs\_C.h, [113](#)
  - SYNC\_MESSAGE\_STOPPED MultiSyncLibraryDefs\_C.h, [113](#)
  - SYNC\_MESSAGE\_SYNCING MultiSyncLibraryDefs\_C.h, [113](#)
  - SYNC\_MESSAGE\_THREAD\_ERROR MultiSyncLibraryDefs\_C.h, [113](#)



- MultiSyncLibraryDefs\_C.h, [113](#)
- SYNC\_MESSAGE\_UNKNOWN\_ERROR
  - MultiSyncLibraryDefs\_C.h, [113](#)
- BOOL
  - FlyCapture2Defs\_C.h, [94](#)
  - MultiSyncLibraryDefs\_C.h, [112](#)
- FALSE
  - FlyCapture2Defs\_C.h, [93](#)
  - MultiSyncLibraryDefs\_C.h, [112](#)
- FULL\_32BIT\_VALUE
  - FlyCapture2Defs\_C.h, [93](#)
  - MultiSyncLibraryDefs\_C.h, [112](#)
- FlyCapture2Defs\_C.h, [89](#)
  - BOOL, [94](#)
  - FALSE, [93](#)
  - TRUE, [93](#)
  - fc2AVIContext, [94](#)
  - fc2AsyncCommandCallback, [94](#)
  - fc2BandwidthAllocation, [94](#)
  - fc2BayerTileFormat, [95](#)
  - fc2BusCallbackType, [95](#)
  - fc2BusEventCallback, [94](#)
  - fc2BusSpeed, [95](#)
  - fc2ByteOrder, [95](#)
  - fc2CallbackHandle, [94](#)
  - fc2ColorProcessingAlgorithm, [96](#)
  - fc2Context, [94](#)
  - fc2DriverType, [96](#)
  - fc2Error, [96](#)
  - fc2FrameRate, [98](#)
  - fc2GigEPropertyType, [98](#)
  - fc2GrabMode, [98](#)
  - fc2GrabTimeout, [99](#)
  - fc2GuiContext, [94](#)
  - fc2ImageEventCallback, [94](#)
  - fc2ImageFileFormat, [99](#)
  - fc2ImageImpl, [94](#)
  - fc2ImageStatisticsContext, [94](#)
  - fc2InterfaceType, [99](#)
  - fc2Mode, [99](#)
  - fc2OSType, [100](#)
  - fc2PCleBusSpeed, [101](#)
  - fc2PixelFormat, [101](#)
  - fc2PropertyType, [102](#)
  - fc2StatisticsChannel, [102](#)
  - fc2TIFFCompressionMethod, [103](#)
  - fc2VideoMode, [103](#)
- FlyCapture2GUI\_C.h, [104](#)
  - fc2CreateGUIContext, [104](#)
  - fc2DestroyGUIContext, [105](#)
  - fc2Disonnect, [105](#)
  - fc2GUIConnect, [105](#)
  - fc2Hide, [105](#)
  - fc2IsVisible, [106](#)
  - fc2Show, [106](#)
  - fc2ShowModal, [106](#)
- FlyCapture2Internal\_C.h, [107](#)
  - IsContextValid, [107](#)
  - IsGuiContextValid, [107](#)
  - SyncCpplImageToStruct, [107](#)
- FlyCapture2Platform\_C.h, [107](#)
- FlyCapture2\_C.h, [37](#)
  - fc2AVIAppend, [46](#)
  - fc2AVIClose, [46](#)
  - fc2AVIOpen, [46](#)
  - fc2CalculateImageStatistics, [47](#)
  - fc2Connect, [47](#)
  - fc2ConvertImage, [47](#)
  - fc2ConvertImageTo, [48](#)
  - fc2CreateAVI, [48](#)
  - fc2CreateContext, [48](#)
  - fc2CreateGigEContext, [49](#)
  - fc2CreateImage, [49](#)
  - fc2CreateImageStatistics, [49](#)
  - fc2DestroyAVI, [50](#)
  - fc2DestroyContext, [50](#)
  - fc2DestroyImage, [50](#)
  - fc2DestroyImageStatistics, [51](#)
  - fc2DetermineBitsPerPixel, [51](#)
  - fc2Disconnect, [51](#)
  - fc2DiscoverGigECameras, [51](#)
  - fc2EnableLUT, [52](#)
  - fc2ErrorToDescription, [52](#)
  - fc2FireBusReset, [52](#)
  - fc2FireSoftwareTrigger, [53](#)
  - fc2FireSoftwareTriggerBroadcast, [53](#)
  - fc2ForceAllIPAddressesAutomatically, [53](#)
  - fc2ForceIPAddressAutomatically, [54](#)
  - fc2ForceIPAddressToCamera, [54](#)
  - fc2GetActiveLUTBank, [54](#)
  - fc2GetCameraFromIndex, [55](#)
  - fc2GetCameraFromSerialNumber, [55](#)
  - fc2GetCameraInfo, [55](#)
  - fc2GetCameraSerialNumberFromIndex, [56](#)
  - fc2GetConfiguration, [56](#)
  - fc2GetCycleTime, [56](#)
  - fc2GetDefaultColorProcessing, [57](#)



- [fc2GetDefaultOutputFormat, 57](#)
- [fc2GetDeviceFromIndex, 57](#)
- [fc2GetEmbeddedImageInfo, 58](#)
- [fc2GetFormat7Configuration, 58](#)
- [fc2GetFormat7Info, 59](#)
- [fc2GetGPIOPinDirection, 60](#)
- [fc2GetGigEConfig, 59](#)
- [fc2GetGigEImageBinningSettings, 59](#)
- [fc2GetGigEImageSettings, 59](#)
- [fc2GetGigEImageSettingsInfo, 59](#)
- [fc2GetGigEImagingMode, 59](#)
- [fc2GetGigEProperty, 59](#)
- [fc2GetGigEStreamChannelInfo, 60](#)
- [fc2GetImageData, 60](#)
- [fc2GetImageStatistics, 61](#)
- [fc2GetImageTimeStamp, 61](#)
- [fc2GetInterfaceTypeFromGuid, 61](#)
- [fc2GetLUTBankInfo, 62](#)
- [fc2GetLUTChannel, 63](#)
- [fc2GetLUTInfo, 63](#)
- [fc2GetLibraryVersion, 62](#)
- [fc2GetMemoryChannel, 63](#)
- [fc2GetMemoryChannelInfo, 64](#)
- [fc2GetNumOfCameras, 64](#)
- [fc2GetNumOfDevices, 64](#)
- [fc2GetNumStreamChannels, 65](#)
- [fc2GetProperty, 65](#)
- [fc2GetPropertyInfo, 65](#)
- [fc2GetRegisterString, 65](#)
- [fc2GetStrobe, 66](#)
- [fc2GetStrobeInfo, 66](#)
- [fc2GetSystemInfo, 66](#)
- [fc2GetTriggerDelay, 67](#)
- [fc2GetTriggerDelayInfo, 67](#)
- [fc2GetTriggerMode, 67](#)
- [fc2GetTriggerModeInfo, 67](#)
- [fc2GetVideoModeAndFrameRate, 68](#)
- [fc2GetVideoModeAndFrameRate-Info, 68](#)
- [fc2H264Open, 69](#)
- [fc2IsCameraControlable, 69](#)
- [fc2LaunchBrowser, 69](#)
- [fc2LaunchCommand, 70](#)
- [fc2LaunchCommandAsync, 70](#)
- [fc2LaunchHelp, 70](#)
- [fc2MJPGOpen, 70](#)
- [fc2QueryGigEImagingMode, 71](#)
- [fc2ReadGVCPMemory, 71](#)
- [fc2ReadGVCPRegister, 71](#)
- [fc2ReadGVCPRegisterBlock, 72](#)
- [fc2ReadRegister, 72](#)
- [fc2ReadRegisterBlock, 72](#)
- [fc2RegisterCallback, 73](#)
- [fc2RescanBus, 73](#)
- [fc2RestoreFromMemoryChannel, 73](#)
- [fc2RetrieveBuffer, 74](#)
- [fc2SaveImage, 74](#)
- [fc2SaveImageWithOptions, 74](#)
- [fc2SaveToMemoryChannel, 75](#)
- [fc2SetActiveLUTBank, 75](#)
- [fc2SetCallback, 75](#)
- [fc2SetConfiguration, 76](#)
- [fc2SetDefaultColorProcessing, 76](#)
- [fc2SetDefaultOutputFormat, 76](#)
- [fc2SetEmbeddedImageInfo, 77](#)
- [fc2SetFormat7Configuration, 77](#)
- [fc2SetFormat7ConfigurationPacket, 77](#)
- [fc2SetGPIOPinDirection, 78](#)
- [fc2SetGPIOPinDirectionBroadcast, 79](#)
- [fc2SetGigEConfig, 78](#)
- [fc2SetGigEImageBinningSettings, 78](#)
- [fc2SetGigEImageSettings, 78](#)
- [fc2SetGigEImagingMode, 78](#)
- [fc2SetGigEProperty, 78](#)
- [fc2SetGigEStreamChannelInfo, 78](#)
- [fc2SetImageData, 79](#)
- [fc2SetImageDimensions, 80](#)
- [fc2SetLUTChannel, 80](#)
- [fc2SetProperty, 80](#)
- [fc2SetPropertyBroadcast, 81](#)
- [fc2SetStrobe, 81](#)
- [fc2SetStrobeBroadcast, 81](#)
- [fc2SetTriggerDelay, 82](#)
- [fc2SetTriggerDelayBroadcast, 82](#)
- [fc2SetTriggerMode, 82](#)
- [fc2SetTriggerModeBroadcast, 83](#)
- [fc2SetUserBuffers, 83](#)
- [fc2SetVideoModeAndFrameRate, 83](#)
- [fc2StartCapture, 84](#)
- [fc2StartCaptureCallback, 84](#)
- [fc2StartSyncCapture, 85](#)
- [fc2StartSyncCaptureCallback, 85](#)
- [fc2StopCapture, 85](#)
- [fc2UnregisterCallback, 86](#)
- [fc2ValidateFormat7Settings, 86](#)
- [fc2WriteGVCPMemory, 86](#)

- fc2WriteGVCPRegister, [87](#)
- fc2WriteGVCPRegisterBlock, [87](#)
- fc2WriteGVCPRegisterBroadcast, [87](#)
- fc2WriteRegister, [88](#)
- fc2WriteRegisterBlock, [88](#)
- fc2WriteRegisterBroadcast, [89](#)
- GPIOPinState
  - fc2EmbeddedImageInfo, [12](#)
- IsContextValid
  - FlyCapture2Internal\_C.h, [107](#)
- IsGuiContextValid
  - FlyCapture2Internal\_C.h, [107](#)
- MultiSyncLibraryDefs\_C.h, [111](#)
  - BOOL, [112](#)
  - FALSE, [112](#)
  - TRUE, [112](#)
  - syncContext, [112](#)
  - syncError, [113](#)
  - syncMessage, [113](#)
- MultiSyncLibraryPlatform\_C.h, [113](#)
- MultiSyncLibrary\_C.h, [107](#)
  - syncCreateContext, [108](#)
  - syncDestroyContext, [108](#)
  - syncDisableCrossPCsSynchronization, [109](#)
  - syncEnableCrossPCsSynchronization, [109](#)
  - syncGetStatus, [109](#)
  - syncGetTimeSinceSynced, [110](#)
  - syncIsTimingBusConnected, [110](#)
  - syncQueryCrossPCsSynchronizationSetting, [110](#)
  - syncRescanMasterTimingBus, [111](#)
  - syncStart, [111](#)
  - syncStop, [111](#)
- ROIPosition
  - fc2EmbeddedImageInfo, [12](#)
- SyncCpplImageToStruct
  - FlyCapture2Internal\_C.h, [107](#)
- TRUE
  - FlyCapture2Defs\_C.h, [93](#)
  - MultiSyncLibraryDefs\_C.h, [112](#)
- absControl
  - fc2TriggerDelay, [32](#)
- absMax
  - fc2TriggerDelayInfo, [33](#)
- absMin
  - fc2TriggerDelayInfo, [33](#)
- absValSupported
  - fc2TriggerDelayInfo, [33](#)
- absValue
  - fc2TriggerDelay, [32](#)
- applicationIPAddress
  - fc2CameraInfo, [7](#)
- applicationPort
  - fc2CameraInfo, [7](#)
- asyncBusSpeed
  - fc2Config, [9](#)
- autoManualMode
  - fc2TriggerDelay, [32](#)
- autoSupported
  - fc2TriggerDelayInfo, [33](#)
- available
  - fc2EmbeddedImageInfoProperty, [12](#)
- bandwidthAllocation
  - fc2Config, [9](#)
- bayerFormat
  - fc2Image, [20](#)
- bayerTileFormat
  - fc2CameraInfo, [7](#)
- binaryFile
  - fc2PGMOption, [26](#)
  - fc2PPMOption, [28](#)
- bitrate
  - fc2H264Option, [19](#)
- brightness
  - fc2EmbeddedImageInfo, [11](#)
- build
  - fc2Version, [35](#)
- busNumber
  - fc2CameraInfo, [7](#)
- byteOrder
  - fc2SystemInfo, [30](#)
- ccpStatus
  - fc2CameraInfo, [7](#)
- chipIdHi
  - fc2ConfigROM, [10](#)
- chipIdLo
  - fc2ConfigROM, [10](#)
- cols
  - fc2Image, [20](#)
- compression
  - fc2TIFFOption, [31](#)
- compressionLevel
  - fc2PNGOption, [27](#)
- configROM
  - fc2CameraInfo, [7](#)

- cpuDescription
  - fc2SystemInfo, [30](#)
- cycleCount
  - fc2TimeStamp, [31](#)
- cycleOffset
  - fc2TimeStamp, [31](#)
- cycleSeconds
  - fc2TimeStamp, [31](#)
- dataSize
  - fc2Image, [20](#)
- defaultGateway
  - fc2CameraInfo, [7](#)
- delay
  - fc2StrobeControl, [28](#)
- destinationIpAddress
  - fc2GigEStreamChannel, [18](#)
- doNotFragment
  - fc2GigEStreamChannel, [18](#)
- driverList
  - fc2SystemInfo, [30](#)
- driverName
  - fc2CameraInfo, [7](#)
- driverType
  - fc2CameraInfo, [7](#)
- duration
  - fc2StrobeControl, [28](#)
- embeddedBrightness
  - fc2ImageMetadata, [21](#)
- embeddedExposure
  - fc2ImageMetadata, [21](#)
- embeddedFrameCounter
  - fc2ImageMetadata, [21](#)
- embeddedGPIOPinState
  - fc2ImageMetadata, [21](#)
- embeddedGain
  - fc2ImageMetadata, [21](#)
- embeddedROIPosition
  - fc2ImageMetadata, [21](#)
- embeddedShutter
  - fc2ImageMetadata, [21](#)
- embeddedStrobePattern
  - fc2ImageMetadata, [21](#)
- embeddedTimeStamp
  - fc2ImageMetadata, [21](#)
- embeddedWhiteBalance
  - fc2ImageMetadata, [21](#)
- enablePacketResend
  - fc2GigEConfig, [15](#)
- enabled
  - fc2LUTData, [25](#)
- exposure
  - fc2EmbeddedImageInfo, [11](#)
- fc2AVIAppend
  - FlyCapture2\_C.h, [46](#)
- fc2AVIClose
  - FlyCapture2\_C.h, [46](#)
- fc2AVIContext
  - FlyCapture2Defs\_C.h, [94](#)
- fc2AVIOpen
  - FlyCapture2\_C.h, [46](#)
- fc2AVIOption, [5](#)
  - frameRate, [5](#)
  - reserved, [5](#)
- fc2AsyncCommandCallback
  - FlyCapture2Defs\_C.h, [94](#)
- fc2BandwidthAllocation
  - FlyCapture2Defs\_C.h, [94](#)
- fc2BayerTileFormat
  - FlyCapture2Defs\_C.h, [95](#)
- fc2BusCallbackType
  - FlyCapture2Defs\_C.h, [95](#)
- fc2BusEventCallback
  - FlyCapture2Defs\_C.h, [94](#)
- fc2BusSpeed
  - FlyCapture2Defs\_C.h, [95](#)
- fc2ByteOrder
  - FlyCapture2Defs\_C.h, [95](#)
- fc2CalculateImageStatistics
  - FlyCapture2\_C.h, [47](#)
- fc2CallbackHandle
  - FlyCapture2Defs\_C.h, [94](#)
- fc2CameraInfo, [6](#)
  - applicationIPAddress, [7](#)
  - applicationPort, [7](#)
  - bayerTileFormat, [7](#)
  - busNumber, [7](#)
  - ccpStatus, [7](#)
  - configROM, [7](#)
  - defaultGateway, [7](#)
  - driverName, [7](#)
  - driverType, [7](#)
  - firmwareBuildTime, [7](#)
  - firmwareVersion, [7](#)
  - gigEMajorVersion, [7](#)
  - gigEMinorVersion, [7](#)
  - iidcVer, [8](#)
  - interfaceType, [8](#)

- ipAddress, 8
- isColorCamera, 8
- macAddress, 8
- maximumBusSpeed, 8
- modelName, 8
- nodeNumber, 8
- pcieBusSpeed, 8
- reserved, 8
- sensorInfo, 8
- sensorResolution, 8
- serialNumber, 8
- subnetMask, 8
- userDefinedName, 8
- vendorName, 8
- xmlURL1, 8
- xmlURL2, 8
- fc2ColorProcessingAlgorithm
  - FlyCapture2Defs\_C.h, 96
- fc2Config, 8
  - asyncBusSpeed, 9
  - bandwidthAllocation, 9
  - grabMode, 9
  - grabTimeout, 9
  - isochBusSpeed, 9
  - minNumImageNotifications, 9
  - numBuffers, 9
  - numImageNotifications, 9
  - registerTimeout, 9
  - registerTimeoutRetries, 9
  - reserved, 9
- fc2ConfigROM, 9
  - chipIdHi, 10
  - chipIdLo, 10
  - nodeVendorId, 10
  - pszKeyword, 10
  - reserved, 10
  - unitSWVer, 10
  - unitSpecId, 10
  - unitSubSWVer, 10
  - vendorUniqueInfo\_0, 10
  - vendorUniqueInfo\_1, 10
  - vendorUniqueInfo\_2, 10
  - vendorUniqueInfo\_3, 10
- fc2Connect
  - FlyCapture2\_C.h, 47
- fc2Context
  - FlyCapture2Defs\_C.h, 94
- fc2ConvertImage
  - FlyCapture2\_C.h, 47
- fc2ConvertImageTo
  - FlyCapture2\_C.h, 48
- fc2CreateAVI
  - FlyCapture2\_C.h, 48
- fc2CreateContext
  - FlyCapture2\_C.h, 48
- fc2CreateGUIContext
  - FlyCapture2GUI\_C.h, 104
- fc2CreateGigEContext
  - FlyCapture2\_C.h, 49
- fc2CreateImage
  - FlyCapture2\_C.h, 49
- fc2CreateImageStatistics
  - FlyCapture2\_C.h, 49
- fc2DestroyAVI
  - FlyCapture2\_C.h, 50
- fc2DestroyContext
  - FlyCapture2\_C.h, 50
- fc2DestroyGUIContext
  - FlyCapture2GUI\_C.h, 105
- fc2DestroyImage
  - FlyCapture2\_C.h, 50
- fc2DestroyImageStatistics
  - FlyCapture2\_C.h, 51
- fc2DetermineBitsPerPixel
  - FlyCapture2\_C.h, 51
- fc2Disconnect
  - FlyCapture2\_C.h, 51
- fc2DiscoverGigECameras
  - FlyCapture2\_C.h, 51
- fc2Disonnect
  - FlyCapture2GUI\_C.h, 105
- fc2DriverType
  - FlyCapture2Defs\_C.h, 96
- fc2EmbeddedImageInfo, 11
  - GPIOPinState, 12
  - ROIPosition, 12
  - brightness, 11
  - exposure, 11
  - frameCounter, 12
  - gain, 12
  - shutter, 12
  - strobePattern, 12
  - timestamp, 12
  - whiteBalance, 12
- fc2EmbeddedImageInfoProperty, 12
  - available, 12
  - onOff, 12
- fc2EnableLUT
  - FlyCapture2\_C.h, 52
- fc2Error

- FlyCapture2Defs\_C.h, 96
- fc2ErrorToDescription
  - FlyCapture2\_C.h, 52
- fc2FireBusReset
  - FlyCapture2\_C.h, 52
- fc2FireSoftwareTrigger
  - FlyCapture2\_C.h, 53
- fc2FireSoftwareTriggerBroadcast
  - FlyCapture2\_C.h, 53
- fc2ForceAllIPAddressesAutomatically
  - FlyCapture2\_C.h, 53
- fc2ForceIPAddressAutomatically
  - FlyCapture2\_C.h, 54
- fc2ForceIPAddressToCamera
  - FlyCapture2\_C.h, 54
- fc2Format7ImageSettings, 12
  - height, 13
  - mode, 13
  - offsetX, 13
  - offsetY, 13
  - pixelFormat, 13
  - reserved, 13
  - width, 13
- fc2Format7Info, 13
  - imageHStepSize, 14
  - imageVStepSize, 14
  - maxHeight, 14
  - maxPacketSize, 14
  - maxWidth, 14
  - minPacketSize, 14
  - mode, 14
  - offsetHStepSize, 14
  - offsetVStepSize, 14
  - packetSize, 14
  - percentage, 14
  - pixelFormatBitField, 14
  - reserved, 14
  - vendorPixelFormatBitField, 14
- fc2Format7PacketInfo, 14
  - maxBytesPerPacket, 14
  - recommendedBytesPerPacket, 15
  - reserved, 15
  - unitBytesPerPacket, 15
- fc2FrameRate
  - FlyCapture2Defs\_C.h, 98
- fc2GUIConnect
  - FlyCapture2GUI\_C.h, 105
- fc2GetActiveLUTBank
  - FlyCapture2\_C.h, 54
- fc2GetCameraFromIndex
  - FlyCapture2\_C.h, 55
- fc2GetCameraFromSerialNumber
  - FlyCapture2\_C.h, 55
- fc2GetCameraInfo
  - FlyCapture2\_C.h, 55
- fc2GetCameraSerialNumberFromIndex
  - FlyCapture2\_C.h, 56
- fc2GetConfiguration
  - FlyCapture2\_C.h, 56
- fc2GetCycleTime
  - FlyCapture2\_C.h, 56
- fc2GetDefaultColorProcessing
  - FlyCapture2\_C.h, 57
- fc2GetDefaultOutputFormat
  - FlyCapture2\_C.h, 57
- fc2GetDeviceFromIndex
  - FlyCapture2\_C.h, 57
- fc2GetEmbeddedImageInfo
  - FlyCapture2\_C.h, 58
- fc2GetFormat7Configuration
  - FlyCapture2\_C.h, 58
- fc2GetFormat7Info
  - FlyCapture2\_C.h, 59
- fc2GetGPIOPinDirection
  - FlyCapture2\_C.h, 60
- fc2GetGigEConfig
  - FlyCapture2\_C.h, 59
- fc2GetGigEImageBinningSettings
  - FlyCapture2\_C.h, 59
- fc2GetGigEImageSettings
  - FlyCapture2\_C.h, 59
- fc2GetGigEImageSettingsInfo
  - FlyCapture2\_C.h, 59
- fc2GetGigEImagingMode
  - FlyCapture2\_C.h, 59
- fc2GetGigEProperty
  - FlyCapture2\_C.h, 59
- fc2GetGigEStreamChannelInfo
  - FlyCapture2\_C.h, 60
- fc2GetImageData
  - FlyCapture2\_C.h, 60
- fc2GetImageStatistics
  - FlyCapture2\_C.h, 61
- fc2GetImageTimeStamp
  - FlyCapture2\_C.h, 61
- fc2GetInterfaceTypeFromGuid
  - FlyCapture2\_C.h, 61
- fc2GetLUTBankInfo
  - FlyCapture2\_C.h, 62
- fc2GetLUTChannel

- FlyCapture2\_C.h, 63
- fc2GetLUTInfo
  - FlyCapture2\_C.h, 63
- fc2GetLibraryVersion
  - FlyCapture2\_C.h, 62
- fc2GetMemoryChannel
  - FlyCapture2\_C.h, 63
- fc2GetMemoryChannelInfo
  - FlyCapture2\_C.h, 64
- fc2GetNumOfCameras
  - FlyCapture2\_C.h, 64
- fc2GetNumOfDevices
  - FlyCapture2\_C.h, 64
- fc2GetNumStreamChannels
  - FlyCapture2\_C.h, 65
- fc2GetProperty
  - FlyCapture2\_C.h, 65
- fc2GetPropertyInfo
  - FlyCapture2\_C.h, 65
- fc2GetRegisterString
  - FlyCapture2\_C.h, 65
- fc2GetStrobe
  - FlyCapture2\_C.h, 66
- fc2GetStrobeInfo
  - FlyCapture2\_C.h, 66
- fc2GetSystemInfo
  - FlyCapture2\_C.h, 66
- fc2GetTriggerDelay
  - FlyCapture2\_C.h, 67
- fc2GetTriggerDelayInfo
  - FlyCapture2\_C.h, 67
- fc2GetTriggerMode
  - FlyCapture2\_C.h, 67
- fc2GetTriggerModelInfo
  - FlyCapture2\_C.h, 67
- fc2GetVideoModeAndFrameRate
  - FlyCapture2\_C.h, 68
- fc2GetVideoModeAndFrameRateInfo
  - FlyCapture2\_C.h, 68
- fc2GigEConfig, 15
  - enablePacketResend, 15
  - maxPacketsToResend, 15
  - reserved, 15
  - timeoutForPacketResend, 15
- fc2GigEImageSettings, 16
  - height, 16
  - offsetX, 16
  - offsetY, 16
  - pixelFormat, 16
  - reserved, 16
  - width, 16
- fc2GigEImageSettingsInfo, 16
  - imageHStepSize, 17
  - imageVStepSize, 17
  - maxHeight, 17
  - maxWidth, 17
  - offsetHStepSize, 17
  - offsetVStepSize, 17
  - pixelFormatBitField, 17
  - reserved, 17
  - vendorPixelFormatBitField, 17
- fc2GigEProperty, 17
  - isReadable, 17
  - isWritable, 17
  - max, 17
  - min, 17
  - propType, 17
  - reserved, 18
  - value, 18
- fc2GigEPropertyType
  - FlyCapture2Defs\_C.h, 98
- fc2GigEStreamChannel, 18
  - destinationIpAddress, 18
  - doNotFragment, 18
  - hostPort, 19
  - interPacketDelay, 19
  - networkInterfaceIndex, 19
  - packetSize, 19
  - reserved, 19
  - sourcePort, 19
- fc2GrabMode
  - FlyCapture2Defs\_C.h, 98
- fc2GrabTimeout
  - FlyCapture2Defs\_C.h, 99
- fc2GuiContext
  - FlyCapture2Defs\_C.h, 94
- fc2H264Open
  - FlyCapture2\_C.h, 69
- fc2H264Option, 19
  - bitrate, 19
  - frameRate, 19
  - height, 19
  - reserved, 19
  - width, 19
- fc2Hide
  - FlyCapture2GUI\_C.h, 105
- fc2IPAddress, 23
  - octets, 23
- fc2Image, 20
  - bayerFormat, 20

- cols, [20](#)
- dataSize, [20](#)
- format, [20](#)
- imageImpl, [20](#)
- pData, [20](#)
- receivedDataSize, [20](#)
- rows, [20](#)
- stride, [20](#)
- fc2ImageEventCallback
  - FlyCapture2Defs\_C.h, [94](#)
- fc2ImageFileFormat
  - FlyCapture2Defs\_C.h, [99](#)
- fc2ImageImpl
  - FlyCapture2Defs\_C.h, [94](#)
- fc2ImageMetadata, [20](#)
  - embeddedBrightness, [21](#)
  - embeddedExposure, [21](#)
  - embeddedFrameCounter, [21](#)
  - embeddedGPIOPinState, [21](#)
  - embeddedGain, [21](#)
  - embeddedROIPosition, [21](#)
  - embeddedShutter, [21](#)
  - embeddedStrobePattern, [21](#)
  - embeddedTimeStamp, [21](#)
  - embeddedWhiteBalance, [21](#)
  - reserved, [21](#)
- fc2ImageStatisticsContext
  - FlyCapture2Defs\_C.h, [94](#)
- fc2InterfaceType
  - FlyCapture2Defs\_C.h, [99](#)
- fc2InternalContext, [21](#)
  - pBusMgr, [22](#)
  - pCamera, [22](#)
- fc2InternalGuiContext, [22](#)
  - pCameraControlDlg, [22](#)
  - pCameraSelectionDlg, [22](#)
- fc2InternalImageCallback, [23](#)
  - pCallback, [23](#)
  - pCallbackData, [23](#)
- fc2IsCameraControllable
  - FlyCapture2\_C.h, [69](#)
- fc2IsVisible
  - FlyCapture2GUI\_C.h, [106](#)
- fc2JPEGOption, [24](#)
  - progressive, [24](#)
  - quality, [24](#)
  - reserved, [24](#)
- fc2JPG2Option, [24](#)
  - quality, [24](#)
  - reserved, [24](#)
- fc2LUTData, [25](#)
  - enabled, [25](#)
  - inputBitDepth, [25](#)
  - numBanks, [25](#)
  - numChannels, [25](#)
  - numEntries, [25](#)
  - outputBitDepth, [25](#)
  - reserved, [25](#)
  - supported, [25](#)
- fc2LaunchBrowser
  - FlyCapture2\_C.h, [69](#)
- fc2LaunchCommand
  - FlyCapture2\_C.h, [70](#)
- fc2LaunchCommandAsync
  - FlyCapture2\_C.h, [70](#)
- fc2LaunchHelp
  - FlyCapture2\_C.h, [70](#)
- fc2MACAddress, [25](#)
  - octets, [25](#)
- fc2MJPEGOpen
  - FlyCapture2\_C.h, [70](#)
- fc2MJPEGOption, [26](#)
  - frameRate, [26](#)
  - quality, [26](#)
  - reserved, [26](#)
- fc2Mode
  - FlyCapture2Defs\_C.h, [99](#)
- fc2OSType
  - FlyCapture2Defs\_C.h, [100](#)
- fc2PCleBusSpeed
  - FlyCapture2Defs\_C.h, [101](#)
- fc2PGMOption, [26](#)
  - binaryFile, [26](#)
  - reserved, [26](#)
- fc2PGRGuid, [27](#)
  - value, [27](#)
- fc2PNGOption, [27](#)
  - compressionLevel, [27](#)
  - interlaced, [27](#)
  - reserved, [27](#)
- fc2PPMOption, [28](#)
  - binaryFile, [28](#)
  - reserved, [28](#)
- fc2PixelFormat
  - FlyCapture2Defs\_C.h, [101](#)
- fc2PropertyType
  - FlyCapture2Defs\_C.h, [102](#)
- fc2QueryGigEImagingMode
  - FlyCapture2\_C.h, [71](#)
- fc2ReadGVCPMemory

- FlyCapture2\_C.h, [71](#)
- fc2ReadGVCPRegister
  - FlyCapture2\_C.h, [71](#)
- fc2ReadGVCPRegisterBlock
  - FlyCapture2\_C.h, [72](#)
- fc2ReadRegister
  - FlyCapture2\_C.h, [72](#)
- fc2ReadRegisterBlock
  - FlyCapture2\_C.h, [72](#)
- fc2RegisterCallback
  - FlyCapture2\_C.h, [73](#)
- fc2RescanBus
  - FlyCapture2\_C.h, [73](#)
- fc2RestoreFromMemoryChannel
  - FlyCapture2\_C.h, [73](#)
- fc2RetrieveBuffer
  - FlyCapture2\_C.h, [74](#)
- fc2SavelImage
  - FlyCapture2\_C.h, [74](#)
- fc2SavelImageWithOptions
  - FlyCapture2\_C.h, [74](#)
- fc2SaveToMemoryChannel
  - FlyCapture2\_C.h, [75](#)
- fc2SetActiveLUTBank
  - FlyCapture2\_C.h, [75](#)
- fc2SetCallback
  - FlyCapture2\_C.h, [75](#)
- fc2SetConfiguration
  - FlyCapture2\_C.h, [76](#)
- fc2SetDefaultColorProcessing
  - FlyCapture2\_C.h, [76](#)
- fc2SetDefaultOutputFormat
  - FlyCapture2\_C.h, [76](#)
- fc2SetEmbeddedImageInfo
  - FlyCapture2\_C.h, [77](#)
- fc2SetFormat7Configuration
  - FlyCapture2\_C.h, [77](#)
- fc2SetFormat7ConfigurationPacket
  - FlyCapture2\_C.h, [77](#)
- fc2SetGPIOPinDirection
  - FlyCapture2\_C.h, [78](#)
- fc2SetGPIOPinDirectionBroadcast
  - FlyCapture2\_C.h, [79](#)
- fc2SetGigEConfig
  - FlyCapture2\_C.h, [78](#)
- fc2SetGigEImageBinningSettings
  - FlyCapture2\_C.h, [78](#)
- fc2SetGigEImageSettings
  - FlyCapture2\_C.h, [78](#)
- fc2SetGigEImagingMode
  - FlyCapture2\_C.h, [78](#)
- fc2SetGigEProperty
  - FlyCapture2\_C.h, [78](#)
- fc2SetGigEStreamChannelInfo
  - FlyCapture2\_C.h, [78](#)
- fc2SetImageData
  - FlyCapture2\_C.h, [79](#)
- fc2SetImageDimensions
  - FlyCapture2\_C.h, [80](#)
- fc2SetLUTChannel
  - FlyCapture2\_C.h, [80](#)
- fc2SetProperty
  - FlyCapture2\_C.h, [80](#)
- fc2SetPropertyBroadcast
  - FlyCapture2\_C.h, [81](#)
- fc2SetStrobe
  - FlyCapture2\_C.h, [81](#)
- fc2SetStrobeBroadcast
  - FlyCapture2\_C.h, [81](#)
- fc2SetTriggerDelay
  - FlyCapture2\_C.h, [82](#)
- fc2SetTriggerDelayBroadcast
  - FlyCapture2\_C.h, [82](#)
- fc2SetTriggerMode
  - FlyCapture2\_C.h, [82](#)
- fc2SetTriggerModeBroadcast
  - FlyCapture2\_C.h, [83](#)
- fc2SetUserBuffers
  - FlyCapture2\_C.h, [83](#)
- fc2SetVideoModeAndFrameRate
  - FlyCapture2\_C.h, [83](#)
- fc2Show
  - FlyCapture2GUI\_C.h, [106](#)
- fc2ShowModal
  - FlyCapture2GUI\_C.h, [106](#)
- fc2StartCapture
  - FlyCapture2\_C.h, [84](#)
- fc2StartCaptureCallback
  - FlyCapture2\_C.h, [84](#)
- fc2StartSyncCapture
  - FlyCapture2\_C.h, [85](#)
- fc2StartSyncCaptureCallback
  - FlyCapture2\_C.h, [85](#)
- fc2StatisticsChannel
  - FlyCapture2Defs\_C.h, [102](#)
- fc2StopCapture
  - FlyCapture2\_C.h, [85](#)
- fc2StrobeControl, [28](#)
  - delay, [28](#)
  - duration, [28](#)



- onOff, [28](#)
- polarity, [28](#)
- reserved, [28](#)
- source, [28](#)
- fc2StrobeInfo, [29](#)
  - maxValue, [29](#)
  - minValue, [29](#)
  - onOffSupported, [29](#)
  - polaritySupported, [29](#)
  - present, [29](#)
  - readOutSupported, [29](#)
  - reserved, [29](#)
  - source, [29](#)
- fc2SystemInfo, [29](#)
  - byteOrder, [30](#)
  - cpuDescription, [30](#)
  - driverList, [30](#)
  - gpuDescription, [30](#)
  - libraryList, [30](#)
  - numCpuCores, [30](#)
  - osDescription, [30](#)
  - osType, [30](#)
  - reserved, [30](#)
  - screenHeight, [30](#)
  - screenWidth, [30](#)
  - sysMemSize, [30](#)
- fc2TIFFCompressionMethod
  - FlyCapture2Defs\_C.h, [103](#)
- fc2TIFFOption, [30](#)
  - compression, [31](#)
  - reserved, [31](#)
- fc2TimeStamp, [31](#)
  - cycleCount, [31](#)
  - cycleOffset, [31](#)
  - cycleSeconds, [31](#)
  - microSeconds, [31](#)
  - reserved, [31](#)
  - seconds, [31](#)
- fc2TriggerDelay, [31](#)
  - absControl, [32](#)
  - absValue, [32](#)
  - autoManualMode, [32](#)
  - onOff, [32](#)
  - onePush, [32](#)
  - present, [32](#)
  - reserved, [32](#)
  - type, [32](#)
  - valueA, [32](#)
  - valueB, [32](#)
- fc2TriggerDelayInfo, [32](#)
  - absMax, [33](#)
  - absMin, [33](#)
  - absValSupported, [33](#)
  - autoSupported, [33](#)
  - manualSupported, [33](#)
  - max, [33](#)
  - min, [33](#)
  - onOffSupported, [33](#)
  - onePushSupported, [33](#)
  - pUnitAbbr, [33](#)
  - pUnits, [33](#)
  - present, [33](#)
  - readOutSupported, [33](#)
  - reserved, [33](#)
  - type, [33](#)
- fc2TriggerMode, [34](#)
  - mode, [34](#)
  - onOff, [34](#)
  - parameter, [34](#)
  - polarity, [34](#)
  - reserved, [34](#)
  - source, [34](#)
- fc2TriggerModelInfo, [34](#)
  - modeMask, [35](#)
  - onOffSupported, [35](#)
  - polaritySupported, [35](#)
  - present, [35](#)
  - readOutSupported, [35](#)
  - reserved, [35](#)
  - softwareTriggerSupported, [35](#)
  - sourceMask, [35](#)
  - valueReadable, [35](#)
- fc2UnregisterCallback
  - FlyCapture2\_C.h, [86](#)
- fc2ValidateFormat7Settings
  - FlyCapture2\_C.h, [86](#)
- fc2Version, [35](#)
  - build, [35](#)
  - major, [35](#)
  - minor, [35](#)
  - type, [35](#)
- fc2VideoMode
  - FlyCapture2Defs\_C.h, [103](#)
- fc2WriteGVCPMemory
  - FlyCapture2\_C.h, [86](#)
- fc2WriteGVCPRegister
  - FlyCapture2\_C.h, [87](#)
- fc2WriteGVCPRegisterBlock
  - FlyCapture2\_C.h, [87](#)
- fc2WriteGVCPRegisterBroadcast

- FlyCapture2\_C.h, 87
- fc2WriteRegister
  - FlyCapture2\_C.h, 88
- fc2WriteRegisterBlock
  - FlyCapture2\_C.h, 88
- fc2WriteRegisterBroadcast
  - FlyCapture2\_C.h, 89
- firmwareBuildTime
  - fc2CameraInfo, 7
- firmwareVersion
  - fc2CameraInfo, 7
- format
  - fc2Image, 20
- frameCounter
  - fc2EmbeddedImageInfo, 12
- frameRate
  - fc2AVIOption, 5
  - fc2H264Option, 19
  - fc2MJPEGOption, 26
- gain
  - fc2EmbeddedImageInfo, 12
- gigEMajorVersion
  - fc2CameraInfo, 7
- gigEMinorVersion
  - fc2CameraInfo, 7
- gpuDescription
  - fc2SystemInfo, 30
- grabMode
  - fc2Config, 9
- grabTimeout
  - fc2Config, 9
- height
  - fc2Format7ImageSettings, 13
  - fc2GigEImageSettings, 16
  - fc2H264Option, 19
- hostPost
  - fc2GigEStreamChannel, 19
- iidcVer
  - fc2CameraInfo, 8
- imageHStepSize
  - fc2Format7Info, 14
  - fc2GigEImageSettingsInfo, 17
- imageImpl
  - fc2Image, 20
- imageVStepSize
  - fc2Format7Info, 14
  - fc2GigEImageSettingsInfo, 17
- inputBitDepth
  - fc2LUTData, 25
- interPacketDelay
  - fc2GigEStreamChannel, 19
- interfaceType
  - fc2CameraInfo, 8
- interlaced
  - fc2PNGOption, 27
- ipAddress
  - fc2CameraInfo, 8
- isColorCamera
  - fc2CameraInfo, 8
- isReadable
  - fc2GigEProperty, 17
- isWritable
  - fc2GigEProperty, 17
- isochBusSpeed
  - fc2Config, 9
- libraryList
  - fc2SystemInfo, 30
- macAddress
  - fc2CameraInfo, 8
- major
  - fc2Version, 35
- manualSupported
  - fc2TriggerDelayInfo, 33
- max
  - fc2GigEProperty, 17
  - fc2TriggerDelayInfo, 33
- maxBytesPerPacket
  - fc2Format7PacketInfo, 14
- maxHeight
  - fc2Format7Info, 14
  - fc2GigEImageSettingsInfo, 17
- maxPacketSize
  - fc2Format7Info, 14
- maxPacketsToResend
  - fc2GigEConfig, 15
- maxValue
  - fc2StrobeInfo, 29
- maxWidth
  - fc2Format7Info, 14
  - fc2GigEImageSettingsInfo, 17
- maximumBusSpeed
  - fc2CameraInfo, 8
- microSeconds
  - fc2TimeStamp, 31
- min

- fc2GigEProperty, 17
  - fc2TriggerDelayInfo, 33
- minNumImageNotifications
  - fc2Config, 9
- minPacketSize
  - fc2Format7Info, 14
- minValue
  - fc2StrobeInfo, 29
- minor
  - fc2Version, 35
- mode
  - fc2Format7ImageSettings, 13
  - fc2Format7Info, 14
  - fc2TriggerMode, 34
- modeMask
  - fc2TriggerModelInfo, 35
- modelName
  - fc2CameraInfo, 8
- networkInterfaceIndex
  - fc2GigEStreamChannel, 19
- nodeNumber
  - fc2CameraInfo, 8
- nodeVendorId
  - fc2ConfigROM, 10
- numBanks
  - fc2LUTData, 25
- numBuffers
  - fc2Config, 9
- numChannels
  - fc2LUTData, 25
- numCpuCores
  - fc2SystemInfo, 30
- numEntries
  - fc2LUTData, 25
- numImageNotifications
  - fc2Config, 9
- octets
  - fc2IPAddress, 23
  - fc2MACAddress, 25
- offsetHStepSize
  - fc2Format7Info, 14
  - fc2GigEImageSettingsInfo, 17
- offsetVStepSize
  - fc2Format7Info, 14
  - fc2GigEImageSettingsInfo, 17
- offsetX
  - fc2Format7ImageSettings, 13
  - fc2GigEImageSettings, 16
- offsetY
  - fc2Format7ImageSettings, 13
  - fc2GigEImageSettings, 16
- onOff
  - fc2EmbeddedImageInfoProperty, 12
  - fc2StrobeControl, 28
  - fc2TriggerDelay, 32
  - fc2TriggerMode, 34
- onOffSupported
  - fc2StrobeInfo, 29
  - fc2TriggerDelayInfo, 33
  - fc2TriggerModelInfo, 35
- onePush
  - fc2TriggerDelay, 32
- onePushSupported
  - fc2TriggerDelayInfo, 33
- osDescription
  - fc2SystemInfo, 30
- osType
  - fc2SystemInfo, 30
- outputBitDepth
  - fc2LUTData, 25
- pBusMgr
  - fc2InternalContext, 22
- pCallback
  - fc2InternalImageCallback, 23
- pCallbackData
  - fc2InternalImageCallback, 23
- pCamera
  - fc2InternalContext, 22
- pCameraControlDlg
  - fc2InternalGuiContext, 22
- pCameraSelectionDlg
  - fc2InternalGuiContext, 22
- pData
  - fc2Image, 20
- pUnitAbbr
  - fc2TriggerDelayInfo, 33
- pUnits
  - fc2TriggerDelayInfo, 33
- packetSize
  - fc2Format7Info, 14
  - fc2GigEStreamChannel, 19
- parameter
  - fc2TriggerMode, 34
- pcieBusSpeed
  - fc2CameraInfo, 8
- percentage
  - fc2Format7Info, 14

- pixelFormat
  - fc2Format7ImageSettings, [13](#)
  - fc2GigEImageSettings, [16](#)
- pixelFormatBitField
  - fc2Format7Info, [14](#)
  - fc2GigEImageSettingsInfo, [17](#)
- polarity
  - fc2StrobeControl, [28](#)
  - fc2TriggerMode, [34](#)
- polaritySupported
  - fc2StrobeInfo, [29](#)
  - fc2TriggerModelInfo, [35](#)
- present
  - fc2StrobeInfo, [29](#)
  - fc2TriggerDelay, [32](#)
  - fc2TriggerDelayInfo, [33](#)
  - fc2TriggerModelInfo, [35](#)
- progressive
  - fc2JPEGOption, [24](#)
- propType
  - fc2GigEProperty, [17](#)
- pszKeyword
  - fc2ConfigROM, [10](#)
- quality
  - fc2JPEGOption, [24](#)
  - fc2JPG2Option, [24](#)
  - fc2MJPGOption, [26](#)
- readOutSupported
  - fc2StrobeInfo, [29](#)
  - fc2TriggerDelayInfo, [33](#)
  - fc2TriggerModelInfo, [35](#)
- receivedDataSize
  - fc2Image, [20](#)
- recommendedBytesPerPacket
  - fc2Format7PacketInfo, [15](#)
- registerTimeout
  - fc2Config, [9](#)
- registerTimeoutRetries
  - fc2Config, [9](#)
- reserved
  - fc2AVIOption, [5](#)
  - fc2CameraInfo, [8](#)
  - fc2Config, [9](#)
  - fc2ConfigROM, [10](#)
  - fc2Format7ImageSettings, [13](#)
  - fc2Format7Info, [14](#)
  - fc2Format7PacketInfo, [15](#)
  - fc2GigEConfig, [15](#)
  - fc2GigEImageSettings, [16](#)
  - fc2GigEImageSettingsInfo, [17](#)
  - fc2GigEProperty, [18](#)
  - fc2GigEStreamChannel, [19](#)
  - fc2H264Option, [19](#)
  - fc2ImageMetadata, [21](#)
  - fc2JPEGOption, [24](#)
  - fc2JPG2Option, [24](#)
  - fc2LUTData, [25](#)
  - fc2MJPGOption, [26](#)
  - fc2PGMOption, [26](#)
  - fc2PNGOption, [27](#)
  - fc2PPMOption, [28](#)
  - fc2StrobeControl, [28](#)
  - fc2StrobeInfo, [29](#)
  - fc2SystemInfo, [30](#)
  - fc2TIFFOption, [31](#)
  - fc2TimeStamp, [31](#)
  - fc2TriggerDelay, [32](#)
  - fc2TriggerDelayInfo, [33](#)
  - fc2TriggerMode, [34](#)
  - fc2TriggerModelInfo, [35](#)
- rows
  - fc2Image, [20](#)
- screenHeight
  - fc2SystemInfo, [30](#)
- screenWidth
  - fc2SystemInfo, [30](#)
- seconds
  - fc2TimeStamp, [31](#)
- sensorInfo
  - fc2CameraInfo, [8](#)
- sensorResolution
  - fc2CameraInfo, [8](#)
- serialNumber
  - fc2CameraInfo, [8](#)
- shutter
  - fc2EmbeddedImageInfo, [12](#)
- softwareTriggerSupported
  - fc2TriggerModelInfo, [35](#)
- source
  - fc2StrobeControl, [28](#)
  - fc2StrobeInfo, [29](#)
  - fc2TriggerMode, [34](#)
- sourceMask
  - fc2TriggerModelInfo, [35](#)
- sourcePort
  - fc2GigEStreamChannel, [19](#)
- stride

- fc2Image, [20](#)
- strobePattern
  - fc2EmbeddedImageInfo, [12](#)
- subnetMask
  - fc2CameraInfo, [8](#)
- supported
  - fc2LUTData, [25](#)
- syncContext
  - MultiSyncLibraryDefs\_C.h, [112](#)
- syncCreateContext
  - MultiSyncLibrary\_C.h, [108](#)
- syncDestroyContext
  - MultiSyncLibrary\_C.h, [108](#)
- syncDisableCrossPCsSynchronization
  - MultiSyncLibrary\_C.h, [109](#)
- syncEnableCrossPCsSynchronization
  - MultiSyncLibrary\_C.h, [109](#)
- syncError
  - MultiSyncLibraryDefs\_C.h, [113](#)
- syncGetStatus
  - MultiSyncLibrary\_C.h, [109](#)
- syncGetTimeSinceSynced
  - MultiSyncLibrary\_C.h, [110](#)
- syncIsTimingBusConnected
  - MultiSyncLibrary\_C.h, [110](#)
- syncMessage
  - MultiSyncLibraryDefs\_C.h, [113](#)
- syncQueryCrossPCsSynchronization-Setting
  - MultiSyncLibrary\_C.h, [110](#)
- syncRescanMasterTimingBus
  - MultiSyncLibrary\_C.h, [111](#)
- syncStart
  - MultiSyncLibrary\_C.h, [111](#)
- syncStop
  - MultiSyncLibrary\_C.h, [111](#)
- sysMemSize
  - fc2SystemInfo, [30](#)
- timeoutForPacketResend
  - fc2GigEConfig, [15](#)
- timestamp
  - fc2EmbeddedImageInfo, [12](#)
- type
  - fc2TriggerDelay, [32](#)
  - fc2TriggerDelayInfo, [33](#)
  - fc2Version, [35](#)
- unitBytesPerPacket
  - fc2Format7PacketInfo, [15](#)
- unitSWVer
  - fc2ConfigROM, [10](#)
- unitSpecId
  - fc2ConfigROM, [10](#)
- unitSubSWVer
  - fc2ConfigROM, [10](#)
- userDefinedName
  - fc2CameraInfo, [8](#)
- value
  - fc2GigEProperty, [18](#)
  - fc2PGRGuid, [27](#)
- valueA
  - fc2TriggerDelay, [32](#)
- valueB
  - fc2TriggerDelay, [32](#)
- valueReadable
  - fc2TriggerModelInfo, [35](#)
- vendorName
  - fc2CameraInfo, [8](#)
- vendorPixelFormatBitField
  - fc2Format7Info, [14](#)
  - fc2GigEImageSettingsInfo, [17](#)
- vendorUniqueInfo\_0
  - fc2ConfigROM, [10](#)
- vendorUniqueInfo\_1
  - fc2ConfigROM, [10](#)
- vendorUniqueInfo\_2
  - fc2ConfigROM, [10](#)
- vendorUniqueInfo\_3
  - fc2ConfigROM, [10](#)
- whiteBalance
  - fc2EmbeddedImageInfo, [12](#)
- width
  - fc2Format7ImageSettings, [13](#)
  - fc2GigEImageSettings, [16](#)
  - fc2H264Option, [19](#)
- xmlURL1
  - fc2CameraInfo, [8](#)
- xmlURL2
  - fc2CameraInfo, [8](#)