

GenICam Pixel Format Names and Values

17-Feb-2017

Pixel Format Name	32-bit value (hex)	Definition	Description
Mono8	0x01080001	PFNC	Monochrome 8-bit
Mono8s	0x01080002	PFNC	Monochrome 8-bit signed
Mono10	0x01100003	PFNC	Monochrome 10-bit unpacked
Mono10Packed	0x010C0004	GigE Vision 2.0	Monochrome 10-bit packed
Mono12	0x01100005	PFNC	Monochrome 12-bit unpacked
Mono12Packed	0x010C0006	GigE Vision 2.0	Monochrome 12-bit packed
Mono16	0x01100007	PFNC	Monochrome 16-bit
BayerGR8	0x01080008	PFNC	Bayer Green-Red 8-bit
BayerRG8	0x01080009	PFNC	Bayer Red-Green 8-bit
BayerGB8	0x0108000A	PFNC	Bayer Green-Blue 8-bit
BayerBG8	0x0108000B	PFNC	Bayer Blue-Green 8-bit
BayerGR10	0x0110000C	PFNC	Bayer Green-Red 10-bit unpacked
BayerRG10	0x0110000D	PFNC	Bayer Red-Green 10-bit unpacked
BayerGB10	0x0110000E	PFNC	Bayer Green-Blue 10-bit unpacked
BayerBG10	0x0110000F	PFNC	Bayer Blue-Green 10-bit unpacked
BayerGR12	0x01100010	PFNC	Bayer Green-Red 12-bit unpacked
BayerRG12	0x01100011	PFNC	Bayer Red-Green 12-bit unpacked
BayerGB12	0x01100012	PFNC	Bayer Green-Blue 12-bit unpacked
BayerBG12	0x01100013	PFNC	Bayer Blue-Green 12-bit unpacked
RGB8	0x02180014	PFNC	Red-Green-Blue 8-bit
BGR8	0x02180015	PFNC	Blue-Green-Red 8-bit
RGBa8	0x02200016	PFNC	Red-Green-Blue-alpha 8-bit
BGRa8	0x02200017	PFNC	Blue-Green-Red-alpha 8-bit
RGB10	0x02300018	PFNC	Red-Green-Blue 10-bit unpacked
BGR10	0x02300019	PFNC	Blue-Green-Red 10-bit unpacked
RGB12	0x0230001A	PFNC	Red-Green-Blue 12-bit unpacked
BGR12	0x0230001B	PFNC	Blue-Green-Red 12-bit unpacked
RGB10V1Packed	0x0220001C	GigE Vision 2.0	Red-Green-Blue 10-bit packed - variant 1
RGB10p32	0x0220001D	PFNC	Red-Green-Blue 10-bit packed into 32-bit
YUV411_8_UYVYY	0x020C001E	PFNC	YUV 4:1:1 8-bit

YUV422_8_UYVY	0x0210001F	PFNC	YUV 4:2:2 8-bit
YUV8_UYV	0x02180020	PFNC	YUV 4:4:4 8-bit
RGB8_Planar	0x02180021	PFNC	Red-Green-Blue 8-bit planar
RGB10_Planar	0x02300022	PFNC	Red-Green-Blue 10-bit unpacked planar
RGB12_Planar	0x02300023	PFNC	Red-Green-Blue 12-bit unpacked planar
RGB16_Planar	0x02300024	PFNC	Red-Green-Blue 16-bit planar
Mono14	0x01100025	PFNC	Monochrome 14-bit unpacked
BayerGR10Packed	0x010C0026	GigE Vision 2.0	Bayer Green-Red 10-bit packed
BayerRG10Packed	0x010C0027	GigE Vision 2.0	Bayer Red-Green 10-bit packed
BayerGB10Packed	0x010C0028	GigE Vision 2.0	Bayer Green-Blue 10-bit packed
BayerBG10Packed	0x010C0029	GigE Vision 2.0	Bayer Blue-Green 10-bit packed
BayerGR12Packed	0x010C002A	GigE Vision 2.0	Bayer Green-Red 12-bit packed
BayerRG12Packed	0x010C002B	GigE Vision 2.0	Bayer Red-Green 12-bit packed
BayerGB12Packed	0x010C002C	GigE Vision 2.0	Bayer Green-Blue 12-bit packed
BayerBG12Packed	0x010C002D	GigE Vision 2.0	Bayer Blue-Green 12-bit packed
BayerGR16	0x0110002E	PFNC	Bayer Green-Red 16-bit
BayerRG16	0x0110002F	PFNC	Bayer Red-Green 16-bit
BayerGB16	0x01100030	PFNC	Bayer Green-Blue 16-bit
BayerBG16	0x01100031	PFNC	Bayer Blue-Green 16-bit
YUV422_8	0x02100032	PFNC	YUV 4:2:2 8-bit
RGB16	0x02300033	PFNC	Red-Green-Blue 16-bit
RGB12V1Packed	0x02240034	GigE Vision 2.0	Red-Green-Blue 12-bit packed - variant 1
RGB565p	0x02100035	PFNC	Red-Green-Blue 5/6/5-bit packed
BGR565p	0x02100036	PFNC	Blue-Green-Red 5/6/5-bit packed
Mono1p	0x01010037	PFNC	Monochrome 1-bit packed
Mono2p	0x01020038	PFNC	Monochrome 2-bit packed
Mono4p	0x01040039	PFNC	Monochrome 4-bit packed
YCbCr8_CbYCr	0x0218003A	PFNC	YCbCr 4:4:4 8-bit
YCbCr422_8	0x0210003B	PFNC	YCbCr 4:2:2 8-bit
YCbCr411_8_CbYYCrYY	0x020C003C	PFNC	YCbCr 4:1:1 8-bit
YCbCr601_8_CbYCr	0x0218003D	PFNC	YCbCr 4:4:4 8-bit BT.601
YCbCr601_422_8	0x0210003E	PFNC	YCbCr 4:2:2 8-bit BT.601
YCbCr601_411_8_CbYYCrYY	0x020C003F	PFNC	YCbCr 4:1:1 8-bit BT.601
YCbCr709_8_CbYCr	0x02180040	PFNC	YCbCr 4:4:4 8-bit BT.709

YCbCr709_422_8	0x02100041	PFNC	YCbCr 4:2:2 8-bit BT.709
YCbCr709_411_8_CbYYCrYY	0x020C0042	PFNC	YCbCr 4:1:1 8-bit BT.709
YCbCr422_8_CbYCrY	0x02100043	PFNC	YCbCr 4:2:2 8-bit
YCbCr601_422_8_CbYCrY	0x02100044	PFNC	YCbCr 4:2:2 8-bit BT.601
YCbCr709_422_8_CbYCrY	0x02100045	PFNC	YCbCr 4:2:2 8-bit BT.709
Mono10p	0x010A0046	PFNC	Monochrome 10-bit packed
Mono12p	0x010C0047	PFNC	Monochrome 12-bit packed
BGR10p	0x021E0048	PFNC	Blue-Green-Red 10-bit packed
BGR12p	0x02240049	PFNC	Blue-Green-Red 12-bit packed
BGR14	0x0230004A	PFNC	Blue-Green-Red 14-bit unpacked
BGR16	0x0230004B	PFNC	Blue-Green-Red 16-bit
BGRa10	0x0240004C	PFNC	Blue-Green-Red-alpha 10-bit unpacked
BGRa10p	0x0228004D	PFNC	Blue-Green-Red-alpha 10-bit packed
BGRa12	0x0240004E	PFNC	Blue-Green-Red-alpha 12-bit unpacked
BGRa12p	0x0230004F	PFNC	Blue-Green-Red-alpha 12-bit packed
BGRa14	0x02400050	PFNC	Blue-Green-Red-alpha 14-bit unpacked
BGRa16	0x02400051	PFNC	Blue-Green-Red-alpha 16-bit
BayerBG10p	0x010A0052	PFNC	Bayer Blue-Green 10-bit packed
BayerBG12p	0x010C0053	PFNC	Bayer Blue-Green 12-bit packed
BayerGB10p	0x010A0054	PFNC	Bayer Green-Blue 10-bit packed
BayerGB12p	0x010C0055	PFNC	Bayer Green-Blue 12-bit packed
BayerGR10p	0x010A0056	PFNC	Bayer Green-Red 10-bit packed
BayerGR12p	0x010C0057	PFNC	Bayer Green-Red 12-bit packed
BayerRG10p	0x010A0058	PFNC	Bayer Red-Green 10-bit packed
BayerRG12p	0x010C0059	PFNC	Bayer Red-Green 12-bit packed
YCbCr411_8	0x020C005A	PFNC	YCbCr 4:1:1 8-bit
YCbCr8	0x0218005B	PFNC	YCbCr 4:4:4 8-bit
RGB10p	0x021E005C	PFNC	Red-Green-Blue 10-bit packed
RGB12p	0x0224005D	PFNC	Red-Green-Blue 12-bit packed
RGB14	0x0230005E	PFNC	Red-Green-Blue 14-bit unpacked
RGBa10	0x0240005F	PFNC	Red-Green-Blue-alpha 10-bit unpacked
RGBa10p	0x02280060	PFNC	Red-Green-Blue-alpha 10-bit packed
RGBa12	0x02400061	PFNC	Red-Green-Blue-alpha 12-bit unpacked
RGBa12p	0x02300062	PFNC	Red-Green-Blue-alpha 12-bit packed

RGBa14	0x02400063	PFNC	Red-Green-Blue-alpha 14-bit unpacked
RGBa16	0x02400064	PFNC	Red-Green-Blue-alpha 16-bit
YCbCr422_10	0x02200065	PFNC	YCbCr 4:2:2 10-bit unpacked
YCbCr422_12	0x02200066	PFNC	YCbCr 4:2:2 12-bit unpacked
SCF1WBWG8	0x01080067	PFNC	Sparse Color Filter #1 White-Blue-White-Green 8-bit
SCF1WBWG10	0x01100068	PFNC	Sparse Color Filter #1 White-Blue-White-Green 10-bit unpacked
SCF1WBWG10p	0x010A0069	PFNC	Sparse Color Filter #1 White-Blue-White-Green 10-bit packed
SCF1WBWG12	0x0110006A	PFNC	Sparse Color Filter #1 White-Blue-White-Green 12-bit unpacked
SCF1WBWG12p	0x010C006B	PFNC	Sparse Color Filter #1 White-Blue-White-Green 12-bit packed
SCF1WBWG14	0x0110006C	PFNC	Sparse Color Filter #1 White-Blue-White-Green 14-bit unpacked
SCF1WBWG16	0x0110006D	PFNC	Sparse Color Filter #1 White-Blue-White-Green 16-bit unpacked
SCF1WGW8	0x0108006E	PFNC	Sparse Color Filter #1 White-Green-White-Blue 8-bit
SCF1WGW10	0x0110006F	PFNC	Sparse Color Filter #1 White-Green-White-Blue 10-bit unpacked
SCF1WGW10p	0x010A0070	PFNC	Sparse Color Filter #1 White-Green-White-Blue 10-bit packed
SCF1WGW12	0x01100071	PFNC	Sparse Color Filter #1 White-Green-White-Blue 12-bit unpacked
SCF1WGW12p	0x010C0072	PFNC	Sparse Color Filter #1 White-Green-White-Blue 12-bit packed
SCF1WGW14	0x01100073	PFNC	Sparse Color Filter #1 White-Green-White-Blue 14-bit unpacked
SCF1WGW16	0x01100074	PFNC	Sparse Color Filter #1 White-Green-White-Blue 16-bit
SCF1WGW8	0x01080075	PFNC	Sparse Color Filter #1 White-Green-White-Red 8-bit
SCF1WGW10	0x01100076	PFNC	Sparse Color Filter #1 White-Green-White-Red 10-bit unpacked
SCF1WGW10p	0x010A0077	PFNC	Sparse Color Filter #1 White-Green-White-Red 10-bit packed
SCF1WGW12	0x01100078	PFNC	Sparse Color Filter #1 White-Green-White-Red 12-bit unpacked
SCF1WGW12p	0x010C0079	PFNC	Sparse Color Filter #1 White-Green-White-Red 12-bit packed
SCF1WGW14	0x0110007A	PFNC	Sparse Color Filter #1 White-Green-White-Red 14-bit unpacked
SCF1WGW16	0x0110007B	PFNC	Sparse Color Filter #1 White-Green-White-Red 16-bit
SCF1WRWG8	0x0108007C	PFNC	Sparse Color Filter #1 White-Red-White-Green 8-bit
SCF1WRWG10	0x0110007D	PFNC	Sparse Color Filter #1 White-Red-White-Green 10-bit unpacked
SCF1WRWG10p	0x010A007E	PFNC	Sparse Color Filter #1 White-Red-White-Green 10-bit packed
SCF1WRWG12	0x0110007F	PFNC	Sparse Color Filter #1 White-Red-White-Green 12-bit unpacked
SCF1WRWG12p	0x010C0080	PFNC	Sparse Color Filter #1 White-Red-White-Green 12-bit packed
SCF1WRWG14	0x01100081	PFNC	Sparse Color Filter #1 White-Red-White-Green 14-bit unpacked
SCF1WRWG16	0x01100082	PFNC	Sparse Color Filter #1 White-Red-White-Green 16-bit
YCbCr10_CbYCr	0x02300083	PFNC	YCbCr 4:4:4 10-bit unpacked
YCbCr10p_CbYCr	0x021E0084	PFNC	YCbCr 4:4:4 10-bit packed

YCbCr12_CbYCr	0x02300085	PFNC	YCbCr 4:4:4 12-bit unpacked
YCbCr12p_CbYCr	0x02240086	PFNC	YCbCr 4:4:4 12-bit packed
YCbCr422_10p	0x02140087	PFNC	YCbCr 4:2:2 10-bit packed
YCbCr422_12p	0x02180088	PFNC	YCbCr 4:2:2 12-bit packed
YCbCr601_10_CbYCr	0x02300089	PFNC	YCbCr 4:4:4 10-bit unpacked BT.601
YCbCr601_10p_CbYCr	0x021E008A	PFNC	YCbCr 4:4:4 10-bit packed BT.601
YCbCr601_12_CbYCr	0x0230008B	PFNC	YCbCr 4:4:4 12-bit unpacked BT.601
YCbCr601_12p_CbYCr	0x0224008C	PFNC	YCbCr 4:4:4 12-bit packed BT.601
YCbCr601_422_10	0x0220008D	PFNC	YCbCr 4:2:2 10-bit unpacked BT.601
YCbCr601_422_10p	0x0214008E	PFNC	YCbCr 4:2:2 10-bit packed BT.601
YCbCr601_422_12	0x0220008F	PFNC	YCbCr 4:2:2 12-bit unpacked BT.601
YCbCr601_422_12p	0x02180090	PFNC	YCbCr 4:2:2 12-bit packed BT.601
YCbCr709_10_CbYCr	0x02300091	PFNC	YCbCr 4:4:4 10-bit unpacked BT.709
YCbCr709_10p_CbYCr	0x021E0092	PFNC	YCbCr 4:4:4 10-bit packed BT.709
YCbCr709_12_CbYCr	0x02300093	PFNC	YCbCr 4:4:4 12-bit unpacked BT.709
YCbCr709_12p_CbYCr	0x02240094	PFNC	YCbCr 4:4:4 12-bit packed BT.709
YCbCr709_422_10	0x02200095	PFNC	YCbCr 4:2:2 10-bit unpacked BT.709
YCbCr709_422_10p	0x02140096	PFNC	YCbCr 4:2:2 10-bit packed BT.709
YCbCr709_422_12	0x02200097	PFNC	YCbCr 4:2:2 12-bit unpacked BT.709
YCbCr709_422_12p	0x02180098	PFNC	YCbCr 4:2:2 12-bit packed BT.709
YCbCr422_10_CbYCrY	0x02200099	PFNC	YCbCr 4:2:2 10-bit unpacked
YCbCr422_10p_CbYCrY	0x0214009A	PFNC	YCbCr 4:2:2 10-bit packed
YCbCr422_12_CbYCrY	0x0220009B	PFNC	YCbCr 4:2:2 12-bit unpacked
YCbCr422_12p_CbYCrY	0x0218009C	PFNC	YCbCr 4:2:2 12-bit packed
YCbCr601_422_10_CbYCrY	0x0220009D	PFNC	YCbCr 4:2:2 10-bit unpacked BT.601
YCbCr601_422_10p_CbYCrY	0x0214009E	PFNC	YCbCr 4:2:2 10-bit packed BT.601
YCbCr601_422_12_CbYCrY	0x0220009F	PFNC	YCbCr 4:2:2 12-bit unpacked BT.601
YCbCr601_422_12p_CbYCrY	0x021800A0	PFNC	YCbCr 4:2:2 12-bit packed BT.601
YCbCr709_422_10_CbYCrY	0x022000A1	PFNC	YCbCr 4:2:2 10-bit unpacked BT.709
YCbCr709_422_10p_CbYCrY	0x021400A2	PFNC	YCbCr 4:2:2 10-bit packed BT.709
YCbCr709_422_12_CbYCrY	0x022000A3	PFNC	YCbCr 4:2:2 12-bit unpacked BT.709
YCbCr709_422_12p_CbYCrY	0x021800A4	PFNC	YCbCr 4:2:2 12-bit packed BT.709
BiColorRGBG8	0x021000A5	PFNC	Bi-color Red/Green - Blue/Green 8-bit
BiColorBGRG8	0x021000A6	PFNC	Bi-color Blue/Green - Red/Green 8-bit

BiColorRGBG10	0x022000A7	PFNC	Bi-color Red/Green - Blue/Green 10-bit unpacked
BiColorRGBG10p	0x021400A8	PFNC	Bi-color Red/Green - Blue/Green 10-bit packed
BiColorBGRG10	0x022000A9	PFNC	Bi-color Blue/Green - Red/Green 10-bit unpacked
BiColorBGRG10p	0x021400AA	PFNC	Bi-color Blue/Green - Red/Green 10-bit packed
BiColorRGBG12	0x022000AB	PFNC	Bi-color Red/Green - Blue/Green 12-bit unpacked
BiColorRGBG12p	0x021800AC	PFNC	Bi-color Red/Green - Blue/Green 12-bit packed
BiColorBGRG12	0x022000AD	PFNC	Bi-color Blue/Green - Red/Green 12-bit unpacked
BiColorBGRG12p	0x021800AE	PFNC	Bi-color Blue/Green - Red/Green 12-bit packed
Coord3D_A8	0x010800AF	PFNC	3D coordinate A 8-bit
Coord3D_B8	0x010800B0	PFNC	3D coordinate B 8-bit
Coord3D_C8	0x010800B1	PFNC	3D coordinate C 8-bit
Coord3D_ABC8	0x021800B2	PFNC	3D coordinate A-B-C 8-bit
Coord3D_ABC8_Planar	0x021800B3	PFNC	3D coordinate A-B-C 8-bit planar
Coord3D_AC8	0x021000B4	PFNC	3D coordinate A-C 8-bit
Coord3D_AC8_Planar	0x021000B5	PFNC	3D coordinate A-C 8-bit planar
Coord3D_A16	0x011000B6	PFNC	3D coordinate A 16-bit
Coord3D_B16	0x011000B7	PFNC	3D coordinate B 16-bit
Coord3D_C16	0x011000B8	PFNC	3D coordinate C 16-bit
Coord3D_ABC16	0x023000B9	PFNC	3D coordinate A-B-C 16-bit
Coord3D_ABC16_Planar	0x023000BA	PFNC	3D coordinate A-B-C 16-bit planar
Coord3D_AC16	0x022000BB	PFNC	3D coordinate A-C 16-bit
Coord3D_AC16_Planar	0x022000BC	PFNC	3D coordinate A-C 16-bit planar
Coord3D_A32f	0x012000BD	PFNC	3D coordinate A 32-bit floating point
Coord3D_B32f	0x012000BE	PFNC	3D coordinate B 32-bit floating point
Coord3D_C32f	0x012000BF	PFNC	3D coordinate C 32-bit floating point
Coord3D_ABC32f	0x026000C0	PFNC	3D coordinate A-B-C 32-bit floating point
Coord3D_ABC32f_Planar	0x026000C1	PFNC	3D coordinate A-B-C 32-bit floating point planar
Coord3D_AC32f	0x024000C2	PFNC	3D coordinate A-C 32-bit floating point
Coord3D_AC32f_Planar	0x024000C3	PFNC	3D coordinate A-C 32-bit floating point planar
Confidence1	0x010800C4	PFNC	Confidence 1-bit unpacked
Confidence1p	0x010100C5	PFNC	Confidence 1-bit packed
Confidence8	0x010800C6	PFNC	Confidence 8-bit
Confidence16	0x011000C7	PFNC	Confidence 16-bit
Confidence32f	0x012000C8	PFNC	Confidence 32-bit floating point

R8	0x010800C9	PFNC	Red 8-bit
R10	0x010A00CA	PFNC	Red 10-bit
R12	0x010C00CB	PFNC	Red 12-bit
R16	0x011000CC	PFNC	Red 16-bit
G8	0x010800CD	PFNC	Green 8-bit
G10	0x010A00CE	PFNC	Green 10-bit
G12	0x010C00CF	PFNC	Green 12-bit
G16	0x011000D0	PFNC	Green 16-bit
B8	0x010800D1	PFNC	Blue 8-bit
B10	0x010A00D2	PFNC	Blue 10-bit
B12	0x010C00D3	PFNC	Blue 12-bit
B16	0x011000D4	PFNC	Blue 16-bit
Coord3D_A10p	0x010A00D5	PFNC	3D coordinate A 10-bit packed
Coord3D_B10p	0x010A00D6	PFNC	3D coordinate B 10-bit packed
Coord3D_C10p	0x010A00D7	PFNC	3D coordinate C 10-bit packed
Coord3D_A12p	0x010C00D8	PFNC	3D coordinate A 12-bit packed
Coord3D_B12p	0x010C00D9	PFNC	3D coordinate B 12-bit packed
Coord3D_C12p	0x010C00DA	PFNC	3D coordinate C 12-bit packed
Coord3D_ABC10p	0x021E00DB	PFNC	3D coordinate A-B-C 10-bit packed
Coord3D_ABC10p_Planar	0x021E00DC	PFNC	3D coordinate A-B-C 10-bit packed planar
Coord3D_ABC12p	0x022400DE	PFNC	3D coordinate A-B-C 12-bit packed
Coord3D_ABC12p_Planar	0x022400DF	PFNC	3D coordinate A-B-C 12-bit packed planar
Coord3D_AC10p	0x021400F0	PFNC	3D coordinate A-C 10-bit packed
Coord3D_AC10p_Planar	0x021400F1	PFNC	3D coordinate A-C 10-bit packed planar
Coord3D_AC12p	0x021800F2	PFNC	3D coordinate A-C 12-bit packed
Coord3D_AC12p_Planar	0x021800F3	PFNC	3D coordinate A-C 12-bit packed planar
YCbCr2020_8_CbYCr	0x021800F4	PFNC	YCbCr 4:4:4 8-bit BT.2020
YCbCr2020_10_CbYCr	0x023000F5	PFNC	YCbCr 4:4:4 10-bit unpacked BT.2020
YCbCr2020_10p_CbYCr	0x021E00F6	PFNC	YCbCr 4:4:4 10-bit packed BT.2020
YCbCr2020_12_CbYCr	0x023000F7	PFNC	YCbCr 4:4:4 12-bit unpacked BT.2020
YCbCr2020_12p_CbYCr	0x022400F8	PFNC	YCbCr 4:4:4 12-bit packed BT.2020
YCbCr2020_411_8_CbYYCrYY	0x020C00F9	PFNC	YCbCr 4:1:1 8-bit BT.2020
YCbCr2020_422_8	0x021000FA	PFNC	YCbCr 4:2:2 8-bit BT.2020
YCbCr2020_422_8_CbYCrY	0x021000FB	PFNC	YCbCr 4:2:2 8-bit BT.2020

YCbCr2020_422_10	0x022000FC	PFNC	YCbCr 4:2:2 10-bit unpacked BT.2020
YCbCr2020_422_10_CbYCrY	0x022000FD	PFNC	YCbCr 4:2:2 10-bit unpacked BT.2020
YCbCr2020_422_10p	0x021400FE	PFNC	YCbCr 4:2:2 10-bit packed BT.2020
YCbCr2020_422_10p_CbYCrY	0x021400FF	PFNC	YCbCr 4:2:2 10-bit packed BT.2020
YCbCr2020_422_12	0x02200100	PFNC	YCbCr 4:2:2 12-bit unpacked BT.2020
YCbCr2020_422_12_CbYCrY	0x02200101	PFNC	YCbCr 4:2:2 12-bit unpacked BT.2020
YCbCr2020_422_12p	0x02180102	PFNC	YCbCr 4:2:2 12-bit packed BT.2020
YCbCr2020_422_12p_CbYCrY	0x02180103	PFNC	YCbCr 4:2:2 12-bit packed BT.2020