

Resource Utilization

Debayer IP						
Device	Configuration	Clock Fmax (MHz)	Registers	LUTs	DSP	EBRs
LFCPNX-100-8BBG484I CertusPro-NX	8 Bits Per Pixel 1 Pixel Per Clock	163 MHz	3500	4483	3	13
	8 Bits Per Pixel 2 Pixel Per Clock	158 MHz	5052	6967	6	24
	8 Bits Per Pixel 4 Pixel Per Clock	148.9 MHz	8006	12211	12	48
	12 Bits Per Pixel 4 Pixels Per clock					
	16 Bits Per Pixel 1 Pixel Per Clock	150 MHz	6011	7378	6	24
	16 Bits Per Pixel 2 Pixel Per Clock	154 MHz ¹	9009	11888	12	48
	16 Bits Per Pixel 4 Pixels Per clock	153 MHz ¹	16157	22640	24	95
LFD2NX-40-8BG256I Certus-NX	8 Bits Per Pixel 1 Pixel Per Clock	158 MHz	3508	4601	3	8
	8 Bits Per Pixel 2 Pixel Per Clock	164 MHz	5052	7107	6	24
	8 Bits Per Pixel 4 Pixel Per Clock	166 MHz	7932	12163	12	48
	12 Bits Per Pixel 4 Pixels Per clock	166 MHz	7932	12163	12	48
	16 Bits Per Pixel 1 Pixel Per Clock	162 MHz	6011	7378	6	24
	16 Bits Per Pixel 2 Pixel Per Clock	158 MHz	8987	11876	12	48
	16 Bits Per Pixel 4 Pixels Per clock					
LIFCL-40-8BG00I CrossLink-NX	8 Bits Per Pixel 1 Pixel Per Clock	167 MHz	3500	4585	3	13
	8 Bits Per Pixel 2 Pixel Per Clock	165 MHz	5052	7107	6	24
	8 Bits Per Pixel 4 Pixel Per Clock	154 MHz	7919	12182	12	48
	12 Bits Per Pixel 4 Pixels Per clock	165 MHz	12476	17751	24	71
	16 Bits Per Pixel 1 Pixel Per Clock	158 MHz	6011	7378	6	24
	16 Bits Per Pixel 2 Pixel Per Clock	157 MHz	8987	11876	12	48
	16 Bits Per Pixel 4 Pixels Per clock					

Note: The result is based on 30 placement iterations.

Color Correction Matrix (CCM) IP						
Device	Configuration	Clock Fmax (MHz)	Registers	LUTs	DSP	EBRs
LFCPNX-100-8BBG484I CertusPro-NX	8 Bits Per Pixel 1 Pixel Per Clock	171 MHz	1560	1682	9	4
	8 Bits Per Pixel 2 Pixel Per Clock	169 MHz	1997	2232	18	6
	8 Bits Per Pixel 4 Pixel Per Clock	164 MHz	2867	3410	36	12
	16 Bits Per Pixel 1 Pixel Per Clock	186 MHz	2606	2975	9	6
	16 Bits Per Pixel 2 Pixel Per Clock	186 MHz	2449	2790	18	12
	16 Bits Per Pixel 4 Pixels Per clock	168 MHz	4091	4887	36	22
LFD2NX-40-8BG256I Certus-NX	8 Bits Per Pixel 1 Pixel Per Clock	168 MHz	1560	1682	9	4
	8 Bits Per Pixel 2 Pixel Per Clock	182 MHz	1997	2232	18	6
	8 Bits Per Pixel 4 Pixel Per Clock	177 MHz	2867	3410	36	12
	16 Bits Per Pixel 1 Pixel Per Clock	176 MHz	1902	2028	9	8
	16 Bits Per Pixel 2 Pixel Per Clock	179 MHz	2606	2975	18	12
	16 Bits Per Pixel 4 Pixels Per clock	179 MHz	4091	4887	36	22
LIFCL-40-8BG00I CrossLink-NX	8 Bits Per Pixel 1 Pixel Per Clock	157 MHz	1342	954	9	4
	8 Bits Per Pixel 2 Pixel Per Clock	180 MHz	1558	1350	18	6
	8 Bits Per Pixel 4 Pixel Per Clock	188 MHz	1996	2091	36	12
	16 Bits Per Pixel 1 Pixel Per Clock	177 MHz	1813	1183	9	6
	16 Bits Per Pixel 2 Pixel Per Clock	170 MHz	2481	3153	18	12
	16 Bits Per Pixel 4 Pixels Per clock	171 MHz	3870	3099	36	12

Automatic White Balance (AWB) IP						
Configuration	Configuration	Clock Fmax (MHz)	Registers	LUTs	DSP	EBRs
LFCPNX-100-8BG484I CertusPro-NX	8 Bits Per Pixel 1 Pixel Per Clock	167 MHz	1539	2303	22	5
	8 Bits Per Pixel 2 Pixel Per Clock	164 MHz	1732	2577	26	7
	8 Bits Per Pixel 4 Pixel Per Clock	176 MHz	2109	3293	38	13
	16 Bits Per Pixel 1 Pixel Per Clock	172 MHz	1755	2537	22	7
	16 Bits Per Pixel 2 Pixel Per Clock	166 MHz	3153	2157	26	13
	16 Bits Per Pixel 4 Pixels Per clock	165 MHz	3005	4495	38	23
LFD2NX-40-8BG256I Certus-NX	8 Bits Per Pixel 1 Pixel Per Clock	164 MHz	1547	2324	22	5
	8 Bits Per Pixel 2 Pixel Per Clock	162 MHz	1748	2627	26	7
	8 Bits Per Pixel 4 Pixel Per Clock	177 MHz	2141	3391	38	13
	16 Bits Per Pixel 1 Pixel Per Clock	164 MHz	1771	2585	22	7
	16 Bits Per Pixel 2 Pixel Per Clock	162 MHz	2157	3153	26	12
	16 Bits Per Pixel 4 Pixels Per clock	167 MHz	3005	4495	38	23
LIFCL-40-8BG00I CrossLink-NX	8 Bits Per Pixel 1 Pixel Per Clock	167 MHz	1547	2324	22	5
	8 Bits Per Pixel 2 Pixel Per Clock	169 MHz	1748	2627	26	7
	8 Bits Per Pixel 4 Pixel Per Clock	179 MHz	2141	3391	38	13
	16 Bits Per Pixel 1 Pixel Per Clock	166 MHz	1771	2585	22	7
	16 Bits Per Pixel 2 Pixel Per Clock	171 MHz	3153	2157	26	13
	16 Bits Per Pixel 4 Pixels Per clock	171 MHz	3005	4495	38	23

Gamma Corrector IP						
Device	Configuration	Clock Fmax (MHz)	Registers	LUTs	EBRs	Programmable I/O
LIFCL-40-9BG400I CrossLink-NX	Configuration 1: Sequential architecture, 3 color planes, same color planes	200 MHz	130	27	2	35
	Configuration 2: Parallel architecture, 3 color planes, same color planes	200 MHz	223	41	3	81
	Configuration 3: Sequential architecture, 3 color planes, different color planes	200 MHz	132	31	3	35
LIFCL-17-7BG256I CrossLink-NX	Configuration 1: Sequential architecture, 3 color planes, same color planes	200 MHz	130	27	2	35
	Configuration 2: Parallel architecture, 3 color planes, same color planes	200 MHz	223	41	3	81
	Configuration 3: Sequential architecture, 3 color planes, different color planes	200 MHz	132	31	3	35
LFD2NX-40-8BG256I Certus-NX	Configuration 1: Sequential architecture, 3 color planes, same color planes	200 MHz	130	27	2	35
	Configuration 2: Parallel architecture, 3 color planes, same color planes	200 MHz	223	41	3	81
	Configuration 3: Sequential architecture, 3 color planes, different color planes	200 MHz	132	31	3	35

Color Space Converter (CSC) IP				
Device	LIFCL-40-9BG400I - CrossLink-NX			
Configuration	Clock Fmax (MHz)	Slice Registers	LUTs	DSP Slices
Default	167 MHz	1539	2303	22
Architecture = Sequential, Others = Default	164 MHz	1732	2577	26
Core Type = YUV to Computer RGB, Others = Default	176 MHz	2109	3293	38
Coefficient Width = 18, Input Tags Width = 10, Provide Synchronous Reset = Unchecked, Others = Default	172 MHz	1755	2537	22