

# Infinite-ISP REGISTER MAP

Master Base Address: A006\_0000, Master High Address: A007\_FFFF

Module Name	Address Register (17-bits)			Absolute Register Index	Data Register (32-bits) 1 section = 4 Bytes 2 sections = 2 Bytes each 4 sections = 1 Byte each	Absolute Register Address	Register Count
	Mode (0 - 3)	Module ID (0 - 63)	Register ID (0 - 127)				
CONFIG	0	0	0	0	RESET	0000	1
	0	0	1	1	SNS_WIDTH	0004	1
	0	0	2	2	SNS_HEIGHT	0008	1
	0	0	3	3	TARGET_CROP_WIDTH	000C	1
	0	0	4	4	TARGET_CROP_HEIGHT	0010	1
	0	0	5	5	BITS	0014	1
	0	0	6	6	BAYER	0018	1
	0	0	7   15	7   15	Reserved	001C   003C	9
	0	0	16	16	TOP_EN*	0040	1
	0	0	17	17	INT_STATUS	0044	1
	0	0	18	18	INT_MASK	0048	1
DPC	0	0	19   127	19   127	Reserved	004C   01FC	109
	0	1	0	128	DPC_THRESHOLD	0200	1
	0	1	1   127	129   255	Reserved	0204   03FC	127
BLC	0	2	0	256	BLC_R	0400	1
	0	2	1	257	BLC_GR	0404	1
	0	2	2	258	BLC_GB	0408	1
	0	2	3	259	BLC_B	040C	1
	0	2	4	260	LINEAR_R	0410	1
	0	2	5	261	LINEAR_GR	0414	1
	0	2	6	262	LINEAR_GB	0418	1
	0	2	7	263	LINEAR_B	041C	1
AE	0	2	8   127	264   383	Reserved	0420   05FC	120
	0	3	0	384	center_illumiance	0600	1
	0	3	1	385	skewness	0604	1
	0	3	2	386	ae_crop_left	0608	1
	0	3	3	387	ae_crop_right	060C	1
	0	3	4	388	ae_crop_top	0610	1
	0	3	5	389	ae_crop_bottom	0614	1
	0	3	6	390	ae_response	0618	1
	0	3	7	391	ae_result_skewness	061C	1
	0	3	8	392	ae_response_debug	0620	1
	0	3	9	393	ae_done	0624	1
	0	3	10   127	394   511	Reserved	0628   07FC	118
	0	4	0	512	dgain_isManual	0800	1
	0	4	1	513	dgain_man_index	0804	1
	0	4	2	514	dgain_index_out	0808	1
	0	4	3   15	515   527	Reserved	080C   083C	13
	0	4	16	528	dgain_array_0	0840	1
	0	4	17	529	dgain_array_1	0844	1
	0	4	18	530	dgain_array_2	0848	1
	0	4	19	531	dgain_array_3	084C	1
	0	4	20	532	dgain_array_4	0850	1
	0	4	21	533	dgain_array_5	0854	1
	0	4	22	534	dgain_array_6	0858	1
	0	4	23	535	dgain_array_7	085C	1

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	Mode (0 - 3)	Module ID (0 - 63)	Register ID (0 - 127)				
DGAIN	0	4	24	536	dgain_array_8	0860	1
	0	4	25	537	dgain_array_9	0864	1
	0	4	26	538	dgain_array_10	0868	1
	0	4	27	539	dgain_array_11	086C	1
	0	4	28	540	dgain_array_12	0870	1
	0	4	29	541	dgain_array_13	0874	1
	0	4	30	542	dgain_array_14	0878	1
	0	4	31	543	dgain_array_15	087C	1
	0	4	32	544	dgain_array_16	0880	1
	0	4	33	545	dgain_array_17	0884	1
	0	4	34	546	dgain_array_18	0888	1
	0	4	35	547	dgain_array_19	088C	1
	0	4	36	548	dgain_array_20	0890	1
	0	4	37	549	dgain_array_21	0894	1
	0	4	38	550	dgain_array_22	0898	1
	0	4	39	551	dgain_array_23	089C	1
	0	4	40	552	dgain_array_24	08A0	1
	0	4	41	553	dgain_array_25	08A4	1
	0	4	42	554	dgain_array_26	08A8	1
	0	4	43	555	dgain_array_27	08AC	1
	0	4	44	556	dgain_array_28	08B0	1
	0	4	45	557	dgain_array_29	08B4	1
	0	4	46	558	dgain_array_30	08B8	1
	0	4	47	559	dgain_array_31	08BC	1
	0	4	48	560	dgain_array_32	08C0	1
	0	4	49	561	dgain_array_33	08C4	1
	0	4	50	562	dgain_array_34	08C8	1
	0	4	51	563	dgain_array_35	08CC	1
	0	4	52	564	dgain_array_36	08D0	1
	0	4	53	565	dgain_array_37	08D4	1
	0	4	54	566	dgain_array_38	08D8	1
	0	4	55	567	dgain_array_39	08DC	1
	0	4	56	568	dgain_array_40	08E0	1
	0	4	57	569	dgain_array_41	08E4	1
	0	4	58	570	dgain_array_42	08E8	1
	0	4	59	571	dgain_array_43	08EC	1
	0	4	60	572	dgain_array_44	08F0	1
	0	4	61	573	dgain_array_45	08F4	1
	0	4	62	574	dgain_array_46	08F8	1
	0	4	63	575	dgain_array_47	08FC	1
	0	4	64	576	dgain_array_48	0900	1
	0	4	65	577	dgain_array_49	0904	1
	0	4	66	578	dgain_array_50	0908	1
	0	4	67	579	dgain_array_51	090C	1
	0	4	68	580	dgain_array_52	0910	1
	0	4	69	581	dgain_array_53	0914	1

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	Mode (0 - 3)	Module ID (0 - 63)	Register ID (0 - 127)				
	0	4	70	582	dgain_array_54	0918	1
	0	4	71	583	dgain_array_55	091C	1
	0	4	72	584	dgain_array_56	0920	1
	0	4	73	585	dgain_array_57	0924	1
	0	4	74	586	dgain_array_58	0928	1
	0	4	75	587	dgain_array_59	092C	1
	0	4	76	588	dgain_array_60	0930	1
	0	4	77	589	dgain_array_61	0934	1
	0	4	78	590	dgain_array_62	0938	1
	0	4	79	591	dgain_array_63	093C	1
	0	4	80	592	dgain_array_64	0940	1
	0	4	81	593	dgain_array_65	0944	1
	0	4	82	594	dgain_array_66	0948	1
	0	4	83	595	dgain_array_67	094C	1
	0	4	84	596	dgain_array_68	0950	1
	0	4	85	597	dgain_array_69	0954	1
	0	4	86	598	dgain_array_70	0958	1
	0	4	87	599	dgain_array_71	095C	1
	0	4	88	600	dgain_array_72	0960	1
	0	4	89	601	dgain_array_73	0964	1
	0	4	90	602	dgain_array_74	0968	1
	0	4	91	603	dgain_array_75	096C	1
	0	4	92	604	dgain_array_76	0970	1
	0	4	93	605	dgain_array_77	0974	1
	0	4	94	606	dgain_array_78	0978	1
	0	4	95	607	dgain_array_79	097C	1
	0	4	96	608	dgain_array_80	0980	1
	0	4	97	609	dgain_array_81	0984	1
	0	4	98	610	dgain_array_82	0988	1
	0	4	99	611	dgain_array_83	098C	1
	0	4	100	612	dgain_array_84	0990	1
	0	4	101	613	dgain_array_85	0994	1
	0	4	102	614	dgain_array_86	0998	1
	0	4	103	615	dgain_array_87	099C	1
	0	4	104	616	dgain_array_88	09A0	1
	0	4	105	617	dgain_array_89	09A4	1
	0	4	106	618	dgain_array_90	09A8	1
	0	4	107	619	dgain_array_91	09AC	1
	0	4	108	620	dgain_array_92	09B0	1
	0	4	109	621	dgain_array_93	09B4	1
	0	4	110	622	dgain_array_94	09B8	1
	0	4	111	623	dgain_array_95	09BC	1
	0	4	112	624	dgain_array_96	09C0	1
	0	4	113	625	dgain_array_97	09C4	1
	0	4	114	626	dgain_array_98	09C8	1
	0	4	115	627	dgain_array_99	09CC	1

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	Mode (0 - 3)	Module ID (0 - 63)		Register ID (0 - 127)						
	0	4	116	127	628	639	Reserved	09D0	09FC	12
LSC	0	5	0	127	640	767	Reserved	0A00	0BFC	128
AWB	0	6	0		768		AWB_UNDEREXPOSED_LIMIT	0C00		1
	0	6	1		769		AWB_OVEREXPOSED_LIMIT	0C04		1
	0	6	2		770		AWB_FRAMES	0C08		1
	0	6	3		771		FINAL_RGAIN	0C0C		1
	0	6	4		772		FINAL_BGAIN	0C10		1
	0	6	5	127	773	895	Reserved	0C14	0DFC	123
WB	0	7	0		896		WB_RGAIN	0E00		1
	0	7	1		897		WB_BGAIN	0E04		1
	0	7	2	127	898	1023	Reserved	0E08	0FFC	126
CFA	0	8	0	127	1024	1151	Reserved	1000	11FC	128
CCM	0	9	0		1152		ccm_rr	1200		1
	0	9	1		1153		ccm_rg	1204		1
	0	9	2		1154		ccm_rb	1208		1
	0	9	3		1155		ccm_gr	120C		1
	0	9	4		1156		ccm_gg	1210		1
	0	9	5		1157		ccm_gb	1214		1
	0	9	6		1158		ccm_br	1218		1
	0	9	7		1159		ccm_bg	121C		1
	0	9	8		1160		ccm_bb	1220		1
	0	9	9	127	1161	1279	Reserved	1224	13FC	119
CSC	0	10	0		1280		csc_conv_std	1400		1
	0	10	1	127	1281	1407	Reserved	1404	15FC	127
LDCI	0	11	0	127	1408	1535	Reserved	1600	17FC	128
Reserved	0	12	13	0	1536	1791	Reserved	1800	1BFC	256
	0	14	0		1792		sharpen_strength	1C00		1
	0	14	1	15	1793	1807	Reserved	1C04	1C3C	15
	0	14	16		1808		luma_kernel_00	1C40		1
	0	14	17		1809		luma_kernel_01	1C44		1
	0	14	18		1810		luma_kernel_02	1C48		1
	0	14	19		1811		luma_kernel_03	1C4C		1
	0	14	20		1812		luma_kernel_04	1C50		1
	0	14	21		1813		luma_kernel_05	1C54		1
	0	14	22		1814		luma_kernel_06	1C58		1
	0	14	23		1815		luma_kernel_07	1C5C		1
	0	14	24		1816		luma_kernel_08	1C60		1
	0	14	25		1817		luma_kernel_10	1C64		1
	0	14	26		1818		luma_kernel_11	1C68		1
	0	14	27		1819		luma_kernel_12	1C6C		1
	0	14	28		1820		luma_kernel_13	1C70		1
	0	14	29		1821		luma_kernel_14	1C74		1
	0	14	30		1822		luma_kernel_15	1C78		1
	0	14	31		1823		luma_kernel_16	1C7C		1
	0	14	32		1824		luma_kernel_17	1C80		1
	0	14	33		1825		luma_kernel_18	1C84		1

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	Mode (0 - 3)	Module ID (0 - 63)	Register ID (0 - 127)				
SHARP	0	14	34	1826	luma_kernel_20	1C88	1
	0	14	35	1827	luma_kernel_21	1C8C	1
	0	14	36	1828	luma_kernel_22	1C90	1
	0	14	37	1829	luma_kernel_23	1C94	1
	0	14	38	1830	luma_kernel_24	1C98	1
	0	14	39	1831	luma_kernel_25	1C9C	1
	0	14	40	1832	luma_kernel_26	1CA0	1
	0	14	41	1833	luma_kernel_27	1CA4	1
	0	14	42	1834	luma_kernel_28	1CA8	1
	0	14	43	1835	luma_kernel_30	1CAC	1
	0	14	44	1836	luma_kernel_31	1CB0	1
	0	14	45	1837	luma_kernel_32	1CB4	1
	0	14	46	1838	luma_kernel_33	1CB8	1
	0	14	47	1839	luma_kernel_34	1CBC	1
	0	14	48	1840	luma_kernel_35	1CC0	1
	0	14	49	1841	luma_kernel_36	1CC4	1
	0	14	50	1842	luma_kernel_37	1CC8	1
	0	14	51	1843	luma_kernel_38	1CCC	1
	0	14	52	1844	luma_kernel_40	1CD0	1
	0	14	53	1845	luma_kernel_41	1CD4	1
	0	14	54	1846	luma_kernel_42	1CD8	1
	0	14	55	1847	luma_kernel_43	1CDC	1
	0	14	56	1848	luma_kernel_44	1CE0	1
	0	14	57	1849	luma_kernel_45	1CE4	1
	0	14	58	1850	luma_kernel_46	1CE8	1
	0	14	59	1851	luma_kernel_47	1CEC	1
	0	14	60	1852	luma_kernel_48	1CF0	1
	0	14	61	1853	luma_kernel_50	1CF4	1
	0	14	62	1854	luma_kernel_51	1CF8	1
	0	14	63	1855	luma_kernel_52	1CFC	1
	0	14	64	1856	luma_kernel_53	1D00	1
	0	14	65	1857	luma_kernel_54	1D04	1
	0	14	66	1858	luma_kernel_55	1D08	1
	0	14	67	1859	luma_kernel_56	1D0C	1
	0	14	68	1860	luma_kernel_57	1D10	1
	0	14	69	1861	luma_kernel_58	1D14	1
	0	14	70	1862	luma_kernel_60	1D18	1
	0	14	71	1863	luma_kernel_61	1D1C	1
	0	14	72	1864	luma_kernel_62	1D20	1
	0	14	73	1865	luma_kernel_63	1D24	1
	0	14	74	1866	luma_kernel_64	1D28	1
	0	14	75	1867	luma_kernel_65	1D2C	1
	0	14	76	1868	luma_kernel_66	1D30	1
	0	14	77	1869	luma_kernel_67	1D34	1
	0	14	78	1870	luma_kernel_68	1D38	1
	0	14	79	1871	luma_kernel_70	1D3C	1

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	Mode (0 - 3)	Module ID (0 - 63)	Register ID (0 - 127)										
	0	14	80		1872		luma_kernel_71				1D40	1	
	0	14	81		1873		luma_kernel_72				1D44	1	
	0	14	82		1874		luma_kernel_73				1D48	1	
	0	14	83		1875		luma_kernel_74				1D4C	1	
	0	14	84		1876		luma_kernel_75				1D50	1	
	0	14	85		1877		luma_kernel_76				1D54	1	
	0	14	86		1878		luma_kernel_77				1D58	1	
	0	14	87		1879		luma_kernel_78				1D5C	1	
	0	14	88		1880		luma_kernel_80				1D60	1	
	0	14	89		1881		luma_kernel_81				1D64	1	
	0	14	90		1882		luma_kernel_82				1D68	1	
	0	14	91		1883		luma_kernel_83				1D6C	1	
	0	14	92		1884		luma_kernel_84				1D70	1	
	0	14	93		1885		luma_kernel_85				1D74	1	
	0	14	94		1886		luma_kernel_86				1D78	1	
	0	14	95		1887		luma_kernel_87				1D7C	1	
	0	14	96		1888		luma_kernel_88				1D80	1	
		0	14	97	127	1889	1919	Reserved				1D84	1DFC
Reserved	0	15	0	127	1920	2047	Reserved						
SECTION (BNR)	0	16	0		2048		bnr_space_kernel_r03	bnr_space_kernel_r02	bnr_space_kernel_r01	bnr_space_kernel_r00	2000		1
	0	16	1		2049		Res	Res	Res	bnr_space_kernel_r04	2004		1
	0	16	2		2050		bnr_space_kernel_r13	bnr_space_kernel_r12	bnr_space_kernel_r11	bnr_space_kernel_r10	2008		1
	0	16	3		2051		Res	Res	Res	bnr_space_kernel_r14	200C		1
	0	16	4		2052		bnr_space_kernel_r23	bnr_space_kernel_r22	bnr_space_kernel_r21	bnr_space_kernel_r20	2010		1
	0	16	5		2053		Res	Res	Res	bnr_space_kernel_r24	2014		1
	0	16	6		2054		bnr_space_kernel_r33	bnr_space_kernel_r32	bnr_space_kernel_r31	bnr_space_kernel_r30	2018		1
	0	16	7		2055		Res	Res	Res	bnr_space_kernel_r34	201C		1
	0	16	8		2056		bnr_space_kernel_r43	bnr_space_kernel_r42	bnr_space_kernel_r41	bnr_space_kernel_r40	2020		1
	0	16	9		2057		Res	Res	Res	bnr_space_kernel_r44	2024		1
	0	16	10	15	2058	2063	Reserved				2028	203C	6
	0	16	16		2064		bnr_space_kernel_g03	bnr_space_kernel_g02	bnr_space_kernel_g01	bnr_space_kernel_g00	2040		1
	0	16	17		2065		Res	Res	Res	bnr_space_kernel_g04	2044		1
	0	16	18		2066		bnr_space_kernel_g13	bnr_space_kernel_g12	bnr_space_kernel_g11	bnr_space_kernel_g10	2048		1
	0	16	19		2067		Res	Res	Res	bnr_space_kernel_g14	204C		1
	0	16	20		2068		bnr_space_kernel_g23	bnr_space_kernel_g22	bnr_space_kernel_g21	bnr_space_kernel_g20	2050		1
	0	16	21		2069		Res	Res	Res	bnr_space_kernel_g24	2054		1
	0	16	22		2070		bnr_space_kernel_g33	bnr_space_kernel_g32	bnr_space_kernel_g31	bnr_space_kernel_g30	2058		1
	0	16	23		2071		Res	Res	Res	bnr_space_kernel_g34	205C		1
	0	16	24		2072		bnr_space_kernel_g43	bnr_space_kernel_g42	bnr_space_kernel_g41	bnr_space_kernel_g40	2060		1
	0	16	25		2073		Res	Res	Res	bnr_space_kernel_g44	2064		1
	0	16	26	31	2074	2079	Reserved				2068	207C	6
	0	16	32		2080		bnr_space_kernel_b03	bnr_space_kernel_b02	bnr_space_kernel_b01	bnr_space_kernel_b00	2080		1
	0	16	33		2081		Res	Res	Res	bnr_space_kernel_b04	2084		1
	0	16	34		2082		bnr_space_kernel_b13	bnr_space_kernel_b12	bnr_space_kernel_b11	bnr_space_kernel_b10	2088		1
	0	16	35		2083		Res	Res	Res	bnr_space_kernel_b14	208C		1
	0	16	36		2084		bnr_space_kernel_b23	bnr_space_kernel_b22	bnr_space_kernel_b21	bnr_space_kernel_b20	2090		1

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BAYER NOISE REDUCTION	0	16	37	2085		Res	Res	Res	bnr_space_kernel_b24	2094		1				
	0	16	38	2086		bnr_space_kernel_b33	bnr_space_kernel_b32	bnr_space_kernel_b31	bnr_space_kernel_b30	2098		1				
	0	16	39	2087		Res	Res	Res	bnr_space_kernel_b34	209C		1				
	0	16	40	2088		bnr_space_kernel_b43	bnr_space_kernel_b42	bnr_space_kernel_b41	bnr_space_kernel_b40	20A0		1				
	0	16	41	2089		Res	Res	Res	bnr_space_kernel_b44	20A4		1				
	0	16	42	63	2090	2111	Reserved				20A8	20FC	22			
	0	16	64	2112		bnr_color_curve_y_r_0				bnr_color_curve_x_r_0				2100		1
	0	16	65	2113		bnr_color_curve_y_r_1				bnr_color_curve_x_r_1				2104		1
	0	16	66	2114		bnr_color_curve_y_r_2				bnr_color_curve_x_r_2				2108		1
	0	16	67	2115		bnr_color_curve_y_r_3				bnr_color_curve_x_r_3				210C		1
	0	16	68	2116		bnr_color_curve_y_r_4				bnr_color_curve_x_r_4				2110		1
	0	16	69	2117		bnr_color_curve_y_r_5				bnr_color_curve_x_r_5				2114		1
	0	16	70	2118		bnr_color_curve_y_r_6				bnr_color_curve_x_r_6				2118		1
	0	16	71	2119		bnr_color_curve_y_r_7				bnr_color_curve_x_r_7				211C		1
	0	16	72	2120		bnr_color_curve_y_r_8				bnr_color_curve_x_r_8				2120		1
	0	16	73	79	2121	2127	Reserved				2124	213C	7			
	0	16	80	2128		bnr_color_curve_y_g_0				bnr_color_curve_x_g_0				2140		1
	0	16	81	2129		bnr_color_curve_y_g_1				bnr_color_curve_x_g_1				2144		1
	0	16	82	2130		bnr_color_curve_y_g_2				bnr_color_curve_x_g_2				2148		1
	0	16	83	2131		bnr_color_curve_y_g_3				bnr_color_curve_x_g_3				214C		1
	0	16	84	2132		bnr_color_curve_y_g_4				bnr_color_curve_x_g_4				2150		1
	0	16	85	2133		bnr_color_curve_y_g_5				bnr_color_curve_x_g_5				2154		1
	0	16	86	2134		bnr_color_curve_y_g_6				bnr_color_curve_x_g_6				2158		1
	0	16	87	2135		bnr_color_curve_y_g_7				bnr_color_curve_x_g_7				215C		1
	0	16	88	2136		bnr_color_curve_y_g_8				bnr_color_curve_x_g_8				2160		1
	0	16	89	95	2137	2143	Reserved				2164	217C	7			
	0	16	96	2144		bnr_color_curve_y_b_0				bnr_color_curve_x_b_0				2180		1
	0	16	97	2145		bnr_color_curve_y_b_1				bnr_color_curve_x_b_1				2184		1
	0	16	98	2146		bnr_color_curve_y_b_2				bnr_color_curve_x_b_2				2188		1
	0	16	99	2147		bnr_color_curve_y_b_3				bnr_color_curve_x_b_3				218C		1
	0	16	100	2148		bnr_color_curve_y_b_4				bnr_color_curve_x_b_4				2190		1
	0	16	101	2149		bnr_color_curve_y_b_5				bnr_color_curve_x_b_5				2194		1
	0	16	102	2150		bnr_color_curve_y_b_6				bnr_color_curve_x_b_6				2198		1
	0	16	103	2151		bnr_color_curve_y_b_7				bnr_color_curve_x_b_7				219C		1
	0	16	104	2152		bnr_color_curve_y_b_8				bnr_color_curve_x_b_8				21A0		1
	0	16	105	127	2153	2175	Reserved				21A4	21FC	23			
Reserved	0	17	20	0	127	2176	2687	Reserved				2200	29FC	512		
NR	0	21	0	2688		nr2d_diff_3	nr2d_diff_2	nr2d_diff_1	nr2d_diff_0	2A00		1				
	0	21	1	2689		nr2d_diff_7	nr2d_diff_6	nr2d_diff_5	nr2d_diff_4	2A04		1				
	0	21	2	2690		nr2d_diff_11	nr2d_diff_10	nr2d_diff_9	nr2d_diff_8	2A08		1				
	0	21	3	2691		nr2d_diff_15	nr2d_diff_14	nr2d_diff_13	nr2d_diff_12	2A0C		1				
	0	21	4	2692		nr2d_diff_19	nr2d_diff_18	nr2d_diff_17	nr2d_diff_16	2A10		1				
	0	21	5	2693		nr2d_diff_23	nr2d_diff_22	nr2d_diff_21	nr2d_diff_20	2A14		1				
	0	21	6	2694		nr2d_diff_27	nr2d_diff_26	nr2d_diff_25	nr2d_diff_24	2A18		1				
	0	21	7	2695		nr2d_diff_31	nr2d_diff_30	nr2d_diff_29	nr2d_diff_28	2A1C		1				
	0	21	8	15	2696	2703	Reserved				2A20	2A3C	8			

# Infinite-ISP REGISTER MAP

Master Base Address: A006\_0000, Master High Address: A007\_FFFF

Module Name	Address Register (17-bits)					Absolute Register Index		Data Register (32-bits) 1 section = 4 Bytes 2 sections = 2 Bytes each 4 sections = 1 Byte each				Absolute Register Address		Register Count				
	Mode (0 - 3)	Module ID (0 - 63)		Register ID (0 - 127)														
2D	0	21		16		2704		nr2d_weight_3		nr2d_weight_2		nr2d_weight_1		nr2d_weight_0		2A40		1
	0	21		17		2705		nr2d_weight_7		nr2d_weight_6		nr2d_weight_5		nr2d_weight_4		2A44		1
	0	21		18		2706		nr2d_weight_11		nr2d_weight_10		nr2d_weight_9		nr2d_weight_8		2A48		1
	0	21		19		2707		nr2d_weight_15		nr2d_weight_14		nr2d_weight_13		nr2d_weight_12		2A4C		1
	0	21		20		2708		nr2d_weight_19		nr2d_weight_18		nr2d_weight_17		nr2d_weight_16		2A50		1
	0	21		21		2709		nr2d_weight_23		nr2d_weight_22		nr2d_weight_21		nr2d_weight_20		2A54		1
	0	21		22		2710		nr2d_weight_27		nr2d_weight_26		nr2d_weight_25		nr2d_weight_24		2A58		1
	0	21		23		2711		nr2d_weight_31		nr2d_weight_30		nr2d_weight_29		nr2d_weight_28		2A5C		1
	0	21		24	127	2712	2815	Reserved						2A60	2BFC	104		
Reserved	0	22	31	0	127	2816	4095	Reserved						2C00	3FFC	1280		
VIP 1 Registers																		
VIP_CONFIG	0	32		0		4096		VIP_RESET						4000		1		
	0	32		1		4097		VIP_WIDTH						4004		1		
	0	32		2		4098		VIP_HEIGHT						4008		1		
	0	32		3		4099		VIP_BITS						400C		1		
	0	32		4	15	4100	4111	Reserved						4010	403C	12		
	0	32		16		4112		VIP_TOP_EN**						4040		1		
	0	32		17		4113		VIP_INT_STATUS						4044		1		
	0	32		18		4114		VIP_INT_MASK						4048		1		
RGBC	0	32		19	127	4115	4223	Reserved						404C	41FC	109		
	0	33		0		4224		in_conv_standard						4200		1		
IRC	0	33		1	127	4225	4351	Reserved						4204	43FC	127		
	0	34		0		4352		CROP_X						4400		1		
	0	34		1		4353		CROP_Y						4404		1		
	0	34		2		4354		IRC_OUTPUT						4408		1		
	0	34		3	127	4355	4479	Reserved						440C	45FC	125		
SCALE	0	35		0		4480		s_in_crop_w						4600		1		
	0	35		1		4481		s_in_crop_h						4604		1		
	0	35		2		4482		s_out_crop_w						4608		1		
	0	35		3		4483		s_out_crop_h						460C		1		
	0	35		4		4484		dscale_w						4610		1		
	0	35		5		4485		dscale_h						4614		1		
	0	35		6	127	4486	4607	Reserved						4618	47FC	122		
OSD	0	36		0		4608		OSD_X						4800		1		
	0	36		1		4609		OSD_Y						4804		1		
	0	36		2		4610		OSD_W						4808		1		
	0	36		3		4611		OSD_H						480C		1		
	0	36		4		4612		Reserved	OSD_COLOR_FG_R		OSD_COLOR_FG_G		OSD_COLOR_FG_B		4810	1		
	0	36		5		4613		Reserved	OSD_COLOR_BG_R		OSD_COLOR_BG_G		OSD_COLOR_BG_B		4814	1		
	0	36		6		4614		ALPHA						4818		1		
	0	36		7	127	4615	4735	Reserved						481C	49FC	121		
YUVConvFormat	0	37		0		4736		YUV444TO422						4A00		1		
	0	37		1	127	4737	4863	Reserved						4A04	4BFC	127		
Reserved	0	38	47	0	127	4864	6143	Reserved						4C00	5FFC	1280		



# Infinite-ISP REGISTER MAP

Master Base Address: A006\_0000, Master High Address: A007\_FFFF

Module Name	Address Register (17-bits)					Absolute Register Index		Data Register (32-bits) 1 section = 4 Bytes 2 sections = 2 Bytes each 4 sections = 1 Byte each				Absolute Register Address		Register Count
	Mode (0 - 3)	Module ID (0 - 63)		Register ID (0 - 127)										
VIP 2 Registers														
VIP_CONFIG	0	48		0		6144		VIP_RESET				6000		1
	0	48		1		6145		VIP_WIDTH				6004		1
	0	48		2		6146		VIP_HEIGHT				6008		1
	0	48		3		6147		VIP_BITS				600C		1
	0	48		4	15	6148	6159	Reserved				6010	603C	12
	0	48		16		6160		VIP_TOP_EN**				6040		1
	0	48		17		6161		VIP_INT_STATUS				6044		1
	0	48		18		6162		VIP_INT_MASK				6048		1
	0	48		17	127	6161	6271	Reserved				6044	61FC	111
RGBC	0	49		0		6272		in_conv_standard				6200		1
	0	49		1	127	6273	6399	Reserved				6204	63FC	127
IRC	0	50		0		6400		CROP_X				6400		1
	0	50		1		6401		CROP_Y				6404		1
	0	50		2		6402		IRC_OUTPUT				6408		1
	0	50		3	127	6403	6527	Reserved				640C	65FC	125
SCALE	0	51		0		6528		s_in_crop_w				6600		1
	0	51		1		6529		s_in_crop_h				6604		1
	0	51		2		6530		s_out_crop_w				6608		1
	0	51		3		6531		s_out_crop_h				660C		1
	0	51		4		6532		dscale_w				6610		1
	0	51		5		6533		dscale_h				6614		1
	0	51		6	127	6534	6655	Reserved				6618	67FC	122
OSD	0	52		0		6656		OSD_X				6800		1
	0	52		1		6657		OSD_Y				6804		1
	0	52		2		6658		OSD_W				6808		1
	0	52		3		6659		OSD_H				680C		1
	0	52		4		6660		Reserved	OSD_COLOR_FG_R	OSD_COLOR_FG_G	OSD_COLOR_FG_B	6810		1
	0	52		5		6661		Reserved	OSD_COLOR_BG_R	OSD_COLOR_BG_G	OSD_COLOR_BG_B	6814		1
	0	52		6		6662		ALPHA				6818		1
	0	52		7	127	6663	6783	Reserved				681C	69FC	121
YUVConvFormat	0	53		0		6784		YUV444TO422				6A00		1
	0	53		1	127	6785	6911	Reserved				6A04	6BFC	127
Reserved	0	54	63	0	127	6912	8191	Reserved				6C00	7FFC	1280
LUTs														
GAMMA LUT	1	0	31	0	127	8192	12287	GAMMA LUT				8000	BFFC	4096
VIP1 OSD RAM	1	32	35	0	127	12288	12799	VIP1 OSD RAM				C000	C7FC	512
	1	36	47	0	127	12800	14335	Reserved				C800	DFFC	1536
VIP2 OSD RAM	1	48	51	0	127	14336	14847	VIP2 OSD RAM				E000	E7FC	512
	1	52	63	0	127	14848	16383	Reserved				E800	FFFF	1536
OECF LUTs	2	0	31	0	127	16384	20479	OECF R LUT				10000	13FFC	4096
	2	32	63	0	127	20480	24575	OECF GR LUT				14000	17FFC	4096
	3	0	31	0	127	24576	28671	OECF GB LUT				18000	1BFFC	4096
	3	32	63	0	127	28672	32767	OECF B LUT				1C000	1FFFF	4096

# Infinite-ISP REGISTER MAP

Master Base Address: A006\_0000, Master High Address: A007\_FFFF

# Infinite-ISP REGISTER MAP

Master Base Address: A006\_0000, Master High Address: A007\_FFFF

Module Name	Address Register (17-bits)			Absolute Register Index	Data Register (32-bits) 1 section = 4 Bytes 2 sections = 2 Bytes each 4 sections = 1 Byte each	Absolute Register Address	Register Count
	Mode (0 - 3)	Module ID (0 - 63)	Register ID (0 - 127)				

TOP_EN*	Module Enables	Bit	VIP1_TOP_EN*	Module Enables	Bit
	DPC_EN	0		RGBC_EN	0
	BLC_EN	1		IRC_EN	1
	LINEAR_EN	2		SCALE_EN	2
	OECF_EN	3	OSD_EN	3	
	DGAIN_EN	4	YUVConvFormat_EN	4	
	LSC_EN	5	Reserved	5 - 31	
	BNR_EN	6	RGBC_EN	0	
	WB_EN	7	IRC_EN	1	
	DEMOSIC_EN	8	SCALE_EN	2	
	CCM_EN	9	OSD_EN	3	
	GAMMA_EN	10	YUVConvFormat_EN	4	
	CSC_EN	11	Reserved	5 - 31	
	LDCI_EN	12			
	2DNR_EN	13			
	SHARP_EN	14			
	AE_EN	15			
	AWB_EN	16			
CROP_EN	17				
Reserved	18 - 31				

# Infinite-ISP REGISTER MAP

Master Base Address: A006\_0000, Master High Address: A007\_FFFF

# Infinite-ISP REGISTER MAP

Master Base Address: A006\_0000, Master High Address: A007\_FFFF

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