

Register Maps

Name	Description	Group	Access	log base 2 of size	Address	bit width	signed/unsigned
test	for testing read/write	debug	rw	0	0	20	unsigned
banyan_mask	active channels for spurs waveforms		rw	0	1	8	unsigned
banyan_reset	trigger a new spurs waveform read		w	0	2	1	unsigned
banyan_status	banyan spurs waveform status bit 30: new data ready		r	0	3	32	unsigned
buf_trig			w	0	4	1	unsigned
keep	Active channel bitmask for "trace data"		w	0	5	32	unsigned
llspi			rw	0	6	9	unsigned
trace_reset	Signal "trace data" to get new data		w	0	7	1	unsigned
trace_status1	"trace data" status: bit 30: new data ready		r	0	8	32	unsigned
trace_status2			r	0	9	32	unsigned
trig_internal			w	0	10	1	unsigned
llspi_status			r	0	19	8	unsigned
llspi_result			r	0	20	8	unsigned
clkcnt			r	0	21	32	unsigned
frequency_4xout			r	0	22	32	unsigned
frequency_adc			r	0	23	32	unsigned
frequency_clkout3			r	0	24	32	unsigned
frequency_dac_dco			r	0	25	32	unsigned
U15_spi_start			w	0	26	1	unsigned
U15_spi_read			w	0	27	1	unsigned
U15_spi_addr			w	0	28	16	unsigned
U15_spi_rdbk			r	0	29	16	unsigned
U15_spi_ready			r	0	30	1	unsigned
U15_sdo_addr			r	0	39	8	unsigned
U15_spi_data			w	0	40	16	unsigned
sync_ad7794_cset			w	0	31	10	unsigned
sync_tps62210_cset			w	0	32	6	unsigned
U18_spi_start			w	0	33	1	unsigned
U18_spi_read			w	0	34	1	unsigned
U18_spi_addr			w	0	35	8	unsigned
U18_spi_rdbk			r	0	36	24	unsigned
U18_spi_ready			r	0	37	1	unsigned
U18_sdo_addr			r	0	38	1	unsigned
U18_spi_data			w	0	41	24	unsigned
U2_clk_reset			w	0	42	1	unsigned
U3_clk_reset			w	0	43	1	unsigned
U2_dout			r	0	44	64	unsigned
U3_dout			r	0	46	64	unsigned
idelayctrl_reset			w	0	48	1	unsigned
U2_iserdes_reset_r			w	0	49	1	unsigned
U3_iserdes_reset_r			w	0	50	1	unsigned
U4_reset_in			rw	0	51	1	unsigned
scanner_scan_trigger			w	0	52	1	unsigned
scanner_autoset_enable			w	0	53	1	unsigned
scanner_debug_sel			w	0	54	1	unsigned
scanner_debug_addr			w	0	55	4	unsigned
U2_bitslip			w	0	56	8	unsigned
U3_bitslip			w	0	57	8	unsigned
adc_mmcm_psen			w	0	58	2	unsigned

mmcm_reset			w	0	59	1	unsigned
frequency_adc2			r	0	60	32	unsigned
phase_step_h			w	0	61	20	unsigned
phase_step_l			w	0	62	12	unsigned
modulo			w	0	63	12	unsigned
ampi			w	0	64	16	unsigned
ampq			w	0	65	16	unsigned
dds_reset			w	0	66	1	unsigned
rf_go	RF enable after interlocks are cleared	interlock	w	0	67	1	unsigned
rf_status			r	0	68	32	unsigned
pulse_boundary			w	0	69	2	unsigned
mon_laser_sel			w	0	70	1	unsigned
ch_keep			w	0	71	12	unsigned
wave_samp_per			w	0	72	8	unsigned
wave_shift			w	0	73	3	unsigned
decay_samp_per			w	0	74	8	unsigned
laser_samp_per			w	0	75	8	unsigned
ddsa_modulo	Not used		rw	0	76	12	unsigned
ddsa_phstep_h	Offset for synthesizer clock multiplier		rw	0	77	20	unsigned
ddsa_phstep_l	Not used		rw	0	78	12	unsigned
rep_period	Seconds between output pulses		w	0	79	28	unsigned
pulse_length	Output pulse length in seconds		w	0	80	24	unsigned
source_re	Open loop DAC setting, real part		rw	0	81	16	unsigned
source_im	Open loop DAC setting, imaginary part		rw	0	82	16	unsigned
close_loop	1 -> close I/Q loop with cavity probe		w	0	83	1	unsigned
monitor			w	0	84	1	unsigned
ab_coeff			w	0	85	16	unsigned
ext_trig_sel			w	0	86	1	unsigned
inlk_mode_1			w	0	87	2	unsigned
inlk_mode_2			w	0	88	2	unsigned
inlk_mode_3			w	0	89	2	unsigned
inlk_mode_4			w	0	90	2	unsigned
reset_inlk_1			w	0	91	1	unsigned
reset_inlk_2			w	0	92	1	unsigned
reset_inlk_3			w	0	93	1	unsigned
reset_inlk_4			w	0	94	1	unsigned
thresh_noise			w	0	95	16	unsigned
thresh_init			w	0	96	16	unsigned
decay_coef			w	0	97	16	unsigned
ddsb_modulo			w	0	98	12	unsigned
ddsb_phstep_h			w	0	99	20	unsigned
ddsb_phstep_l			w	0	100	12	unsigned
adc1_max			r	0	101	16	unsigned
adc2_max			r	0	102	16	unsigned
adc3_max			r	0	103	16	unsigned
adc4_max			r	0	104	16	unsigned
adc1_min			r	0	105	16	unsigned
adc2_min			r	0	106	16	unsigned
adc3_min			r	0	107	16	unsigned
adc4_min			r	0	108	16	unsigned
slow_reset			w	0	109	1	unsigned
v_thresh			w	3	0x5000	16	unsigned
ramtest			rw	3	0x02000	16	unsigned
scanner_mirror_val			r	4	0x3000	7	unsigned
scanner			w	4	0x4000	5	unsigned

banyan_data			r	13	0x10000	32	unsigned
trace_data			r	13	0x20000	16	signed
scanner_result_val			r	11	0x130000	8	unsigned