



CRATE	SLOT	Ch	EPICS Name & MDS tag	MDSplus ENGINEERING tree FCPC branch signal node names	Scale Factor	Comment	TFTR Power Supply
							ETF2-PSS-9
							ETF2-PSS-9
							ETF2-PSS-9
							ETF2-PSS-A
							ETF2-PSS-A
							ETF2-PSS-A
							ETF2-PSS-A
19	2	1	pc_pf1au_pss_2s_i	PF1AU_P2SI	6000 a/v	A	EOH1-PSS-1
19	2	2	pc_pf1au_pss_1s_i	PF1AU_P1SI	6000 a/v	B	EOH1-PSS-1
19	2	3	pc_pf1au_pss_2s_v	PF1AU_P2SV	300 v/v	A	EOH1-PSS-1
19	2	4	pc_pf1au_pss_1s_v	PF1AU_P1SV	300 v/v	B	EOH1-PSS-1
19	2	5	pc_chi_pss_2s_1p_i	CHI_P2S_1PI	6000 a/v	A	EOH1-PSS-2
19	2	6	pc_chi_pss_1s_2p_i	CHI_P1S_2PI	6000 a/v	B	EOH1-PSS-2
19	2	7	pc_chi_pss_2s_1p_v	CHI_P2S_1PV	300 v/v	A	EOH1-PSS-2
19	2	8	pc_chi_pss_1s_2p_v	CHI_P1S_2PV	300 v/v	B	EOH1-PSS-2
19	2	9	pc_pf3u_pss_2s_1p_i	PF3U_P2S_1PI	6000 a/v	A	EOH2-PSS-1
19	2	10	pc_pf3u_pss_1s_1p_i	PF3U_P1S_1PI	6000 a/v	B	EOH2-PSS-1
19	2	11	pc_pf3u_pss_2s_1p_v	PF3U_P2S_1PV	300 v/v	A	EOH2-PSS-1
19	2	12	pc_pf3u_pss_1s_1p_v	PF3U_P1S_1PV	300 v/v	B	EOH2-PSS-1
10	17	1	pc_pf3u_pss_2s_2p_i	PF3U_P2S_2PI	6000 a/v	A	EEF1-PSS-1
10	17	2	pc_pf3u_pss_1s_2p_i	PF3U_P1S_2PI	6000 a/v	B	EEF1-PSS-1
10	17	3	pc_pf3u_pss_2s_2p_v	PF3U_P2S_2PV	300 v/v	A	EEF1-PSS-1
10	17	4	pc_pf3u_pss_1s_2p_v	PF3U_P1S_2PV	300 v/v	B	EEF1-PSS-1
10	17	5	pc_pf3l_pss_2s_2p_i	PF3L_P2S_2PI	6000 a/v	A	EEF1-PSS-2
10	17	6	pc_pf3l_pss_1s_2p_i	PF3L_P1S_2PI	6000 a/v	B	EEF1-PSS-2
10	17	7	pc_pf3l_pss_2s_2p_v	PF3L_P2S_2PV	300 v/v	A	EEF1-PSS-2
10	17	8	pc_pf3l_pss_1s_2p_v	PF3L_P1S_2PV	300 v/v	B	EEF1-PSS-2
10	17	9	pc_pf4_pss_2s_i	PF4_P2SI	6000 a/v	A	EEF2-PSS-1
10	17	10	pc_pf4_pss_1s_i	PF4_P1SI	6000 a/v	B	EEF2-PSS-1
10	17	11	pc_pf4_pss_2s_v	PF4_P2SV	300 v/v	A	EEF2-PSS-1
10	17	12	pc_pf4_pss_1s_v	PF4_P1SV	300 v/v	B	EEF2-PSS-1
10	17	13	not used			A	EEF2-PSS-2
10	17	14	not used			B	EEF2-PSS-2
10	17	15	not used			A	EEF2-PSS-2
10	17	16	not used			B	EEF2-PSS-2
12	17	1	pc_pf1cl_pss_2s_1p_i	PF1CL_P2S1PI	6000 a/v	A	EEF3-PSS-1
12	17	2	pc_pf1cl_pss_1s_1p_i	PF1CL_P1S1PI	6000 a/v	B	EEF3-PSS-1
12	17	3	pc_pf1cl_pss_2s_1p_v	PF1CL_P2S1PV	300 v/v	A	EEF3-PSS-1
12	17	4	pc_pf1cl_pss_1s_1p_v	PF1CL_P1S1PV	300 v/v	B	EEF3-PSS-1
12	17	5	pc_pf1cl_pss_2s_2p_i	PF1CL_P2S2PI	6000 a/v	A	EEF3-PSS-2
12	17	6	pc_pf1cl_pss_1s_2p_i	PF1CL_P1S2PI	6000 a/v	B	EEF3-PSS-2
12	17	7	pc_pf1cl_pss_2s_2p_v	PF1CL_P2S2PV	300 v/v	A	EEF3-PSS-2
12	17	8	pc_pf1cl_pss_1s_2p_v	PF1CL_P1S2PV	300 v/v	B	EEF3-PSS-2
12	17	9	former pf1b		6000 a/v		EEF4-PS-1, Section A
12	17	10	former pf1b		6000 a/v		EEF4-PS-1, Section B
12	17	11	former pf1b		300 v/v		EEF4-PS-1, Section A
12	17	12	former pf1b		300 v/v		EEF4-PS-1, Section B
12	17	13	pc_pf1cu_pss_2s_1p_i	PF1CU_P2S1PI	6000 a/v	A	EEF4-PSS-2
12	17	14	pc_pf1cu_pss_1s_1p_i	PF1CU_P1S1PI	6000 a/v	B	EEF4-PSS-2
12	17	15	pc_pf1cu_pss_2s_1p_v	PF1CU_P2S1PV	300 v/v	A	EEF4-PSS-2
12	17	16	pc_pf1cu_pss_1s_1p_v	PF1CU_P1S1PV	300 v/v	B	EEF4-PSS-2
18	2	13	pc_hf_pss_1A_i	HF_P1A_I	6000 a/v	A	EHF-PSS-1
18	2	14	pc_hf_pss_1B_i	HF_P1B_I	6000 a/v	A	EHF-PSS-1
18	2	15	pc_hf_pss_1A_v	HF_P1A_V	300 v/v	A	EHF-PSS-1
18	2	16	pc_hf_pss_1B_v	HF_P1B_V	300 v/v	A	EHF-PSS-1
20	2	1	pc_pf2l_pss_2s_i	PF2L_P2SI	6000 a/v	A	EOH3-PSS-1
20	2	2	pc_pf2l_pss_1s_i	PF2L_P1SI	6000 a/v	B	EOH3-PSS-1
20	2	3	pc_pf2l_pss_2s_v	PF2L_P2SV	300 v/v	A	EOH3-PSS-1
20	2	4	pc_pf2l_pss_1s_v	PF2L_P1SV	300 v/v	B	EOH3-PSS-1
20	2	5	pc_pf1cu_pss_2s_2p_i	PF1CU_P2S2PI	6000 a/v	A	EOH3-PSS-2
20	2	6	pc_pf1cu_pss_1s_2p_i	PF1CU_P1S2PI	6000 a/v	B	EOH3-PSS-2
20	2	7	pc_pf1cu_pss_2s_2p_v	PF1CU_P2S2PV	300 v/v	A	EOH3-PSS-2
20	2	8	pc_pf1cu_pss_1s_2p_v	PF1CU_P1S2PV	300 v/v	B	EOH3-PSS-2
20	2	9	pc_pf3l_pss_2s_1p_i	PF3L_P2S_1PI	6000 a/v	A	EOH4-PSS-1
20	2	10	pc_pf3l_pss_1s_1p_i	PF3L_P1S_1PI	6000 a/v	B	EOH4-PSS-1
20	2	11	pc_pf3l_pss_2s_1p_v	PF3L_P2S_1PV	300 v/v	A	EOH4-PSS-1
20	2	12	pc_pf3l_pss_1s_1p_v	PF3L_P1S_1PV	300 v/v	B	EOH4-PSS-1
21	2	1	pc_pf2u_pss_2s_i	PF2U_P2SI	6000 a/v	A	EOH5-PSS-1
21	2	2	pc_pf2u_pss_1s_i	PF2U_P1SI	6000 a/v	B	EOH5-PSS-1
21	2	3	pc_pf2u_pss_2s_v	PF2U_P2SV	300 v/v	A	EOH5-PSS-1
21	2	4	pc_pf2u_pss_1s_v	PF2U_P1SV	300 v/v	B	EOH5-PSS-1
21	2	5	section A not used		6000 a/v	A	EOH5-PSS-2

CRATE	SLOT	Ch	EPICS Name & MDS tag	MDSplus ENGINEERING tree FCPC branch signal node names	Scale Factor	Comment	TFTR Power Supply
21	2	6	pc_pf5_pss_2s_i	PF5_P2SI	6000 a/v	B	EOH5-PSS-2
21	2	7	section A not used		300 v/v	A	EOH5-PSS-2
21	2	8	pc_pf5_pss_2s_v	PF5_P2SV	300 v/v	B	EOH5-PSS-2
21	2	9	pc_pf5_pss_3s_i	PF5_P3SI	6000 a/v	A	EOH6-PSS-1
21	2	10	pc_pf5_pss_1s_i	PF5_P1SI	6000 a/v	B	EOH6-PSS-1
21	2	11	pc_pf5_pss_3s_v	PF5_P3SV	300 v/v	A	EOH6-PSS-1
21	2	12	pc_pf5_pss_1s_v	PF5_P1SV	300 v/v	B	EOH6-PSS-1
8	16	1	pc_tf_pf1_gfc_p	?	1v=0ma, 4v=0.100a		?
8	16	2	pc_tf_pf1_gfc_n	?	1v=0ma, 4v=0.100a		?
8	16	3	pc_oh_gfc_p	?	1v=0ma, 4v=0.100a		?
8	16	4	pc_oh_gfc_n	?	1v=0ma, 4v=0.100a		?
8	16	5	pc_pf2345_gfc_p	?	1v=0ma, 4v=0.100a		?
8	16	6	pc_pf2345_gfc_n	?	1v=0ma, 4v=0.100a		?
8	16	7	pc_chi_gfc_p	?	1v=0ma, 4v=0.100a		?
8	16	8	pc_chi_gfc_n	?	1v=0ma, 4v=0.100a		?
			<b>epics Pvname &amp; mds tag</b>	<b>mds node</b>			<b>alternate tag</b>
18	16	1	pc_tf_pss_perm	tf_pperm	1 V/V	volts	
18	16	2	pc_oh_pss_perm	oh_pperm	1 V/V	volts	
18	16	3	pc_pf1_pss_perm	pf1_pperm	1 V/V	volts	
18	16	4	pc_pf2_pss_perm	pf2_pperm	1 V/V	volts	
18	16	5	pc_tf_lv1_ft	tf_lv1_ft	1 V/V	volts	pc_tf_lv1_1_ft
18	16	6	pc_oh_lv1_ft	oh_lv1_ft	1 V/V	volts	pc_oh_lv1_1_ft
18	16	7	pc_pf1_lv1_ft	pf1_lv1_ft	1 V/V	volts	pc_pf1_lv1_1_ft
18	16	8	pc_pf2_lv1_ft	pf2_lv1_ft	1 V/V	volts	pc_pf2_lv1_1_ft
18	16	9	pc_paux_ft	paux_ft	1 V/V	volts	
18	16	10	Spare (0-5V)		1 V/V	volts	
18	16	11	Spare (0-5V)		1 V/V	volts	
18	16	12	Spare (0-5V)		1 V/V	volts	
18	16	13	Spare (0-5V)		1 V/V	volts	
18	16	14	Spare (0-5V)		1 V/V	volts	
18	16	15	Spare (0-5V)		1 V/V	volts	
18	16	16	Spare (0-5V)		1 V/V	volts	
				<b>(tag)</b>			
38	10	1	pc_RWM1_I	PC_RWM1_I	500 A/V	amps	test cell crate
38	10	2	pc_RWM2_I	PC_RWM2_I	500 A/V	amps	shared with FISO
38	10	3	pc_RWM3_I	PC_RWM3_I	500 A/V	amps	
38	10	4	pc_RWM4_I	PC_RWM4_I	500 A/V	amps	
38	10	5	pc_RWM5_I	PC_RWM5_I	500 A/V	amps	
38	10	6	pc_RWM6_I	PC_RWM6_I	500 A/V	amps	
				<b>(tag)</b>			
37	8	1	same as tag but all lowercase	PC_SPA2_FLTSTATUS	1		
37	8	2	same as tag but all lowercase	PC_SPA2_SU4_CHRG_I	125A/V	TD chan 2	+5V => 625 amps
37	8	3	same as tag but all lowercase	PC_SPA2_SU5_CHRG_I	125A/V	TD chan 3	+5V => 625 amps
37	8	4	same as tag but all lowercase	PC_SPA2_SU6_CHRG_I	125A/V	TD chan 4	+5V => 625 amps
37	8	5	same as tag but all lowercase	PC_SPA2_SU4_FLT	1		
37	8	6	same as tag but all lowercase	PC_SPA2_SU5_FLT	1		
37	8	7	same as tag but all lowercase	PC_SPA2_SU6_FLT	1		
37	8	8	same as tag but all lowercase	PC_SPA2_SU4_PERM	1		
37	8	9	same as tag but all lowercase	PC_SPA2_SU5_PERM	1		
37	8	10	same as tag but all lowercase	PC_SPA2_SU6_PERM	1		
37	8	11	same as tag but all lowercase	PC_SPA2_SU4_REF	2	TD chan 11	the voltage request to get a set current
37	8	12	same as tag but all lowercase	PC_SPA2_SU5_REF	2	TD chan 12	
37	8	13	same as tag but all lowercase	PC_SPA2_SU6_REF	2	TD chan 13	
37	8	14	same as tag but all lowercase	PC_SPA2_CHAN14	1		
37	8	15	same as tag but all lowercase	PC_SPA2_CHAN15	1		
37	8	16	same as tag but all lowercase	PC_SPA2_CHAN16	1		
				full path ENGINEERING::TOP.EPICS.FCPC.DIGITIZERS:			
			<b>no EPICS name, just MDS tag</b>	<b>MDS node</b>	<b>Scaling</b>		
nstx-dtacq209	1		PC_PCUR_1_LG	not shown here. Look in skylark directory	1000000	amps	
nstx-dtacq209	2		PC_PF1AU_CHI_CUR_1	/u/nstx/fcpc/config/DT209	5000	amps	
nstx-dtacq209	3		PC_PF1BU_CUR_1		1	amps	
nstx-dtacq209	4		PC_PF1CU_CUR_1		2500	amps	
nstx-dtacq209	5		PC_PF2U_CUR_1		5000	amps	
nstx-dtacq209	6		PC_PF3U_CUR_1		5000	amps	
nstx-dtacq209	7		PC_PF4_CUR_1		3000	amps	
nstx-dtacq209	8		PC_PF5_CUR_1		5000	amps	
nstx-dtacq209	9		PC_PF3L_CUR_1		2500	amps	
nstx-dtacq209	10		PC_PF2L_CUR_1		5000	amps	
nstx-dtacq209	11		PC_PF1CL_CUR_1		5000	amps	
nstx-dtacq209	12		PC_PF1BL_CUR_1		1	amps	
nstx-dtacq209	13		PC_PF1AL_CUR_1		2500	amps	
nstx-dtacq209	14		PC_OH_CUR_1		2500	amps	
nstx-dtacq209	15		PC_TF_CUR_1		15000	amps	

CRATE	SLOT	Ch	EPICS Name & MDS tag	MDSplus ENGINEERING tree FCPC branch signal node names	Scale Factor	Comment	TFTR Power Supply
nstx-dtacq209		16	PC_DUMMY_LOAD_CUR		2500	amps	
nstx-dtacq209		17	PC_PCUR_2_LG		1000000	amps	
nstx-dtacq209		18	PC_PF1AU_CHI_CUR_2		5000	amps	
nstx-dtacq209		19	PC_PF1BU_CUR_2		1	amps	
nstx-dtacq209		20	PC_PF1CU_CUR_2		2500	amps	
nstx-dtacq209		21	PC_PF2U_CUR_2		2500	amps	
nstx-dtacq209		22	PC_PF3U_CUR_2		2500	amps	
nstx-dtacq209		23	PC_PF4_CUR_2		3000	amps	
nstx-dtacq209		24	PC_PF5_CUR_2		2500	amps	
nstx-dtacq209		25	PC_PF3L_CUR_2		2500	amps	
nstx-dtacq209		26	PC_PF2L_CUR_2		2500	amps	
nstx-dtacq209		27	PC_PF1CL_CUR_2		5000	amps	
nstx-dtacq209		28	PC_PF1BL_CUR_2		1	amps	
nstx-dtacq209		29	PC_PF1AL_CUR_2		2500	amps	
nstx-dtacq209		30	PC_OH_CUR_2		2500	amps	
nstx-dtacq209		31	PC_TF_CUR_2		15000	amps	
nstx-dtacq209		32	PC_ENG_SPARE		1	amps	
nstx-dtacq209		33	PC_TF_BR_1_CUR_3		2500	amps	
nstx-dtacq209		34	PC_TF_BR_2_CUR_3		2500	amps	
nstx-dtacq209		35	PC_TF_BR_3_CUR_3		2500	amps	
nstx-dtacq209		36	PC_TF_BR_4_CUR_3		2500	amps	
nstx-dtacq209		37	PC_TF_BR_5_CUR_3		2500	amps	
nstx-dtacq209		38	PC_TF_BR_6_CUR_3		2500	amps	
nstx-dtacq209		39	PC_TF_BR_7_CUR_3		2500	amps	
nstx-dtacq209		40	PC_TF_BR_8_CUR_3		2500	amps	
nstx-dtacq209		41	PC_OH_BR_1_CUR_1		1	amps	
nstx-dtacq209		42	PC_OH_BR_2_CUR_1		1	amps	
nstx-dtacq209		43	PC_OH_BR_1_CUR_2		1	amps	
nstx-dtacq209		44	PC_OH_BR_2_CUR_2		1	amps	
nstx-dtacq209		45	PC_HSC3_CHAN_13		1	amps	
nstx-dtacq209		46	PC_NBP		1	watts	
nstx-dtacq209		47	PC_PCUR_1_HG		10000	amps	
nstx-dtacq209		48	PC_PCUR_2_HG		10000	amps	
nstx-dtacq209		49	PC_TF_LKAT_CUR_1		1	amps	
nstx-dtacq209		50	PC_FO_CHAN_16		1	volts	
nstx-dtacq209		51	PC_FO_CHAN_15		1	volts	
nstx-dtacq209		52	PC_FO_CHAN_14		1	volts	
nstx-dtacq209		53	PC_FO_CHAN_13		1	volts	
nstx-dtacq209		54	PC_FO_CHAN_12		1	volts	
nstx-dtacq209		55	PC_FO_CHAN_11		1	volts	
nstx-dtacq209		56	PC_ROG_1_HG		10000	amps	
nstx-dtacq209		57	PC_ROG_1_LG		80000	amps	
nstx-dtacq209		58	PC_IVV_IT_1		60000	amps	
nstx-dtacq209		59	PC_IVV_IT_2		60000	amps	
nstx-dtacq209		60	PC_IVV_U_E_S		120000	amps	
nstx-dtacq209		61	PC_IVV_L_E_S		120000	amps	
nstx-dtacq209		62	PC_IVV_U_O_S		120000	amps	
nstx-dtacq209		63	PC_IVV_L_O_S		120000	amps	
nstx-dtacq209		64	PC_ROG_2_HG		100000	amps	
nstx-dtacq209		65	PC_ROG_2_LG		800000	amps	
nstx-dtacq209		66	PC_IVV_In_1		150000	amps	
nstx-dtacq209		67	PC_IVV_Out_1		250000	amps	
nstx-dtacq209		68	PC_IVV_Tot_1		400000	amps	
nstx-dtacq209		69	PC_IPCALC_TELEM_1		1	volts	
nstx-dtacq209		70	PC_IPCALC_SPARE_1		1	volts	
nstx-dtacq209		71	PC_NB_PERM_1		1	volts	
nstx-dtacq209		72	PC_CHI_PERM		1	volts	
nstx-dtacq209		73	PC_RF_PERM		1	volts	
nstx-dtacq209		74	PC_GIS_PERM		1	volts	
nstx-dtacq209		75	PC_IVV_In_2		150000	amps	
nstx-dtacq209		76	PC_IVV_Out_2		250000	amps	
nstx-dtacq209		77	PC_IVV_Tot_2		400000	amps	
nstx-dtacq209		78	PC_IPCALC_TELEM_2		1	volts	
nstx-dtacq209		79	PC_IPCALC_SPARE_2		1	volts	
nstx-dtacq209		80	PC_NB_PERM_2		1	volts	
nstx-dtacq209		81	PC_SOP_EOP_GATE		1	volts	
nstx-dtacq209		82	PC_TF_LKAT_CUR_2		1	amps	
nstx-dtacq209		83	PC_TF_HCS_FLT		1	volts	
nstx-dtacq209		84	PC_OHPFCHI_HCS_FLT		1	volts	
nstx-dtacq209		85	PC_TF_BR_12_CUR_1		3750	amps	
nstx-dtacq209		86	PC_TF_BR_34_CUR_1		3750	amps	
nstx-dtacq209		87	PC_TF_BR_56_CUR_1		3750	amps	
nstx-dtacq209		88	PC_TF_BR_78_CUR_1		3750	amps	
nstx-dtacq209		89	PC_TF_BR_12_CUR_2		3750	amps	
nstx-dtacq209		90	PC_TF_BR_34_CUR_2		3750	amps	
nstx-dtacq209		91	PC_TF_BR_56_CUR_2		3750	amps	
nstx-dtacq209		92	PC_TF_BR_78_CUR_2		3750	amps	
nstx-dtacq209		93	PC_DITFDT		50	kA/sec	
nstx-dtacq209		94	PC_DM_VTF		222.72	volts	
nstx-dtacq209		95	PC_DM_ITF		20000	amps	
nstx-dtacq209		96	PC_DM_FLUX		4.036	webers	

CRATE	SLOT	Ch	EPICS Name & MDS tag	MDSplus ENGINEERING tree FCPC branch signal node names	Scale Factor	Comment	TFTR Power Supply
				full path ENGINEERING::TOP.EPICS.FCPC.DIGITIZERS:			
			no EPICS name, just MDS tag	MDS node	Scaling		
nstx-dtacq214		1	PC_PF1AU_SDS_VD1_1	not shown here. Look in skylark directory	3168	volts	
nstx-dtacq214		2	PC_PF1AU_SDS_VD2_1	/u/nstx/fcpc/config/DT214	3168	volts	
nstx-dtacq214		3	PC_PF3U_SDS_VD1_1		3168	volts	
nstx-dtacq214		4	PC_PF3U_SDS_VD2_1		3168	volts	
nstx-dtacq214		5	PC_PF2L_SDS_VD1_1		3168	volts	
nstx-dtacq214		6	PC_PF2L_SDS_VD2_1		3168	volts	
nstx-dtacq214		7	PC_PF3L_SDS_VD1_1		3168	volts	
nstx-dtacq214		8	PC_PF3L_SDS_VD2_1		3168	volts	
nstx-dtacq214		9	PC_PF2U_SDS_VD1_1		3168	volts	
nstx-dtacq214		10	PC_PF2U_SDS_VD2_1		3168	volts	
nstx-dtacq214		11	PC_PF5_SDS_VD1_1		3168	volts	
nstx-dtacq214		12	PC_PF5_SDS_VD2_1		3168	volts	
nstx-dtacq214		13	PC_PF1AL_SDS_VD1_1		3168	volts	
nstx-dtacq214		14	PC_PF1AL_SDS_VD2_1		3168	volts	
nstx-dtacq214		15	PC_PF4_SDS_VD1_1		3168	volts	
nstx-dtacq214		16	PC_PF4_SDS_VD2_1		3168	volts	
nstx-dtacq214		17	PC_PF1CL_SDS_VD1_1		3168	volts	
nstx-dtacq214		18	PC_PF1CL_SDS_VD2_1		3168	volts	
nstx-dtacq214		19	PC_PF1CU_SDS_VD1_1		3168	volts	
nstx-dtacq214		20	PC_PF1CU_SDS_VD2_1		3168	volts	
nstx-dtacq214		21	PC_SPARE2_SDS_VD1_1		3168	volts	
nstx-dtacq214		22	PC_SPARE2_SDS_VD2_1		3168	volts	
nstx-dtacq214		23	PC_HF_SDS_VD1_1		3168	volts	
nstx-dtacq214		24	PC_HF_SDS_VD2_1		3168	volts	
nstx-dtacq214		25	PC_RWM_SDS_VD1_1		3168	volts	
nstx-dtacq214		26	PC_RWM_SDS_VD2_1		3168	volts	
nstx-dtacq214		27	PC_TF_SDS_VD1_1		3168	volts	
nstx-dtacq214		28	PC_TF_SDS_VD2_1		3168	volts	
nstx-dtacq214		29	PC_OH_SDS_VD1_1		3168	volts	
nstx-dtacq214		30	PC_OH_SDS_VD2_1		3168	volts	
nstx-dtacq214		31	PC_TF_GNDCUR		0.02	amps	
nstx-dtacq214		32	PC_OH_GNDCUR		0.02	amps	
nstx-dtacq214		33	PC_CHI_GNDCUR		0.02	amps	
nstx-dtacq214		34	PC_PF_GNDCUR		0.02	amps	
nstx-dtacq214		35	PC_SP1_GNDCUR		0.02	amps	
nstx-dtacq214		36	PC_SP2_GNDCUR		0.02	amps	
nstx-dtacq214		37	PC_SP3_GNDCUR		0.02	amps	
nstx-dtacq214		38	PC_SP4_GNDCUR		0.02	amps	
			raw dtacq head node: pc_dt196_01	full path ENGINEERING::TOP.EPICS.FCPC.DIGITIZERS:			
			no EPICS name, just MDS tag	MDS node	Scaling (units/volt)	units	
spa-dtacq1		1	PC_SPA_SU1_I1	not shown here. Look in skylark directory	800A/V (+/-5V => +/- 4,000 amps)	amps	Sub Unit 1 Output Current 1
spa-dtacq1		2	PC_SPA_SU1_I2	/u/nstx/fcpc/config/	800A/V (+/-5V => +/- 4,000 amps)	amps	Sub Unit 1 Output Current 2
spa-dtacq1		3	PC_SPA_SU2_I1		800A/V (+/-5V => +/- 4,000 amps)	amps	Sub Unit 2 Output Current 1
spa-dtacq1		4	PC_SPA_SU2_I2		800A/V (+/-5V => +/- 4,000 amps)	amps	Sub Unit 2 Output Current 2
spa-dtacq1		5	PC_SPA_SU3_I1		800A/V (+/-5V => +/- 4,000 amps)	amps	Sub Unit 3 Output Current 1
spa-dtacq1		6	PC_SPA_SU3_I2		800A/V (+/-5V => +/- 4,000 amps)	amps	Sub Unit 3 Output Current 2
spa-dtacq1		7	PC_SPA1_IDC		400A/V (+/-5V => +/- 2,000 amps)	amps	SPA 1 Total Chrg. Crnt. (SU1&SU2&SU3)
spa-dtacq1		8	PC_SPA_SU1_V		200V/V (+/-5V => +/-1,000 volts)	volts	Sub Unit 1 Output Voltage
spa-dtacq1		9	PC_SPA_SU2_V		200V/V (+/-5V => +/-1,000 volts)	volts	Sub Unit 2 Output Voltage
spa-dtacq1		10	PC_SPA_SU3_V		200V/V (+/-5V => +/-1,000 volts)	volts	Sub Unit 3 Output Voltage
spa-dtacq1		11	PC_SPA1_VDC		240 V/V (+5V => 1,200 volts)	volts	SPA 1 VDC
spa-dtacq1		12	PC_SPA1_ACP_FLT		(1-3V no fault, 6-8V fault)	volts	ACP/SPA 1 Fault Status
spa-dtacq1		13	PC_SPA_SU23_CHRG_I		400A/V (+/-5V => +/- 2,000 amps)	amps	sub Unit 2 & 3 Chrg. Crnt.
spa-dtacq1		14	PC_SPA_SU3_CHRG_I		400A/V (+/-5V => +/- 2,000 amps)	amps	Sub Unit 3 Chrg. Crnt.
computed in MDS			PC_SPA_SU2_CHRG_I		scaled in digitized signal	amps	su23 - su3
computed in MDS			PC_SPA_SU1_CHRG_I		scaled in digitized signal	amps	Total - su23
spa-dtacq1		15	PC_SPA_SU1_FLT		1	volts	Sub Unit 1 Fault
spa-dtacq1		16	PC_SPA_SU2_FLT		1	volts	Sub Unit 2 Fault
spa-dtacq1		17	PC_SPA_SU3_FLT		1	volts	Sub Unit 3 Fault
spa-dtacq1		18	PC_SPA_SU1_PRM		1	volts	SubUnit1Permissive (Enable)
spa-dtacq1		19	PC_SPA_SU2_PRM		1	volts	SubUnit2Permissive (Enable)
spa-dtacq1		20	PC_SPA_SU3_PRM		1	volts	SubUnit3Permissive (Enable)
spa-dtacq1		21	PC_SPA_SU1_REF		1	volts	Sub Unit 1 Reference. the voltage request to
spa-dtacq1		22	PC_SPA_SU2_REF		1	volts	Sub Unit 2 Reference
spa-dtacq1		23	PC_SPA_SU3_REF		1	volts	Sub Unit 3 Reference
spa-dtacq1		24	PC_SPA_SU4_I1		400A/V (+/-10V => 4,000 amps)	amps	Sub Unit 4 Output Current 1
spa-dtacq1		25	PC_SPA_SU4_I2		400A/V (+/-10V => 4,000 amps)	amps	Sub Unit 4 Output Current 2
spa-dtacq1		26	PC_SPA_SU5_I1		400A/V (+/-10V => 4,000 amps)	amps	Sub Unit 5 Output Current 1
spa-dtacq1		27	PC_SPA_SU5_I2		400A/V (+/-10V => 4,000 amps)	amps	Sub Unit 5 Output Current 2
spa-dtacq1		28	PC_SPA_SU6_I1		400A/V (+/-10V => 4,000 amps)	amps	Sub Unit 6 Output Current 1
spa-dtacq1		29	PC_SPA_SU6_I2		400A/V (+/-10V => 4,000 amps)	amps	Sub Unit 6 Output Current 2
spa-dtacq1		30	PC_SPA2_IDC		200A/V (+10V => 2,000 amps)	amps	SPA 2 Total Chrg. Crnt.
spa-dtacq1		31	PC_SPA_SU4_V		100V/V (+/-10V => +/-1,000 volts)	volts	Sub Unit 4 Output Voltage

CRATE	SLOT	Ch	EPICS Name & MDS tag	MDSplus ENGINEERING tree FCPC branch signal node names	Scale Factor	Comment	TFTR Power Supply
spa-dtacq1		32	PC_SPA_SU5_V		100V/V (+/-10V => +/-1,000 volts)	volts	Sub Unit 5 Output Voltage
spa-dtacq1		33	PC_SPA_SU6_V		100V/V (+/-10V => +/-1,000 volts)	volts	Sub Unit 6 Output Voltage
spa-dtacq1		34	PC_SPA2_VDC		120V/V (+10V => 1,200 V)	volts	SPA 2 VDC
spa-dtacq1		35	PC_SPA_H910_REF		1	volts	CAMAC Triangle
spa-dtacq1		36	PC_SPA2_ACP_FLT		(1-3V no fault, 6-8V fault)	volts	ACP/SPA 2 Fault Status

## Revision History

### Rev 9 By R. Marsala on 04JAN01

Attached is the rev 9 of fcpv\_dignames file. Pages 2 and 3 and the header have been changed (changes have light yellow fill). The changes include:

1. Update of Plasma Current transfer function
2. Addition of Diamagnetic signals
3. Addition of PF1A branch currents
4. Replacing MG signals with 4 magnetic signals
5. Changed header to give a fixed date.

### Rev 10 By P. Sichta n 22MAR01

**Change Names and Transfer Functions of the following TD signals all in Crate 22, Slot 09.**

Channel 3 from pc\_chi\_gndcur\_1.聽 CHI\_GNDC\_1.聽 200ma/V to pc\_TF\_gndcur\_1.聽 TF\_GNDC\_1\_20ma/V  
Channel 4 from pc\_chi\_gndcur\_1c.聽 CHI\_GNDC\_1c.聽 100ma/V to pc\_TF\_gndcur\_2.聽 TF\_GNDC\_2\_10ma/V  
Channel 5 from pc\_chi\_gndcur\_2.聽 CHI\_GNDC\_2.聽 200ma/V to pc\_OH\_gndcur\_1.聽 OH\_GNDC\_1\_20ma/V  
Channel 6 from pc\_chi\_gndcur\_2c.聽 CHI\_GNDC\_2c.聽 100ma/V to pc\_OH\_gndcur\_2.聽 OH\_GNDC\_2\_10ma/V  
Changed units column to show scaling in amps/volt not kiloamps/volt.

### Rev 11 By P. Sichta n 24APR01

Corrections for PF1A addition per CLN.

### Rev 12 By P. Sichta 01JUN01

Changed EPICS crate #16 to DAS Crate 42(Note this was actually done in Jan, 2001).  
Added signal pc\_d(fff)d. in crate 42.

### Rev 13 by RJM 10AUG01

Added /or changed names of the following TD signals all in Crate 22, Slot 9

Channel 1 from unused to pc\_TF\_gndcur.聽 TF\_GNDCUR\_20mA/V  
Channel 2 from unused to pc\_OH\_gndcur.聽 OH\_GNDCUR\_20mA/V  
Channel 3 from pc\_TF\_gndcur\_1.聽 TF\_GNDCUR\_1 to pc\_CHI\_gndcur.聽 TF\_GNDCUR\_20mA/V  
Channel 4 from pc\_TF\_gndcur\_2.聽 TF\_GNDCUR\_2\_10ma/V to pc\_PF1\_gndcur.聽 PF1\_GNDCUR\_20mA/V  
Channel 5 from pc\_OH\_gndcur\_1.聽 OH\_GNDCUR\_1\_20ma/V to pc\_PF2\_gndcur.聽 PF2\_GNDCUR\_20mA/V  
Channel 6 from pc\_OH\_gndcur\_2.聽 OH\_GNDCUR\_2\_10ma/V to pc\_SP1\_gndcur.聽 SP1\_GNDCUR\_20mA/V  
Channel 10 from unused to pc\_SP2\_gndcur.聽 SP2\_GNDCUR\_20mA/V  
Channel 11 from unused to pc\_SP3\_gndcur.聽 SP3\_GNDCUR\_20mA/V

### Rev 14 by PS 16NOV01

Changed crate 22 slot 9 MDSplus node names from GNDCUR to GNDC. Rev 11 used GNDC.

### Rev 15 by PS 20NOV01

Corrected PF and SP\_GNDCUR names. Only one PF and four spares inst gnd currents.

### Rev 16 by PS 07FEB02

Name changes for signal: pc\_pf1a\_br\_1\_cur\_1f -> pc\_pf1a\_cur\_3\_invf

### Rev 17 by PS 11FEB02

Changed names of Fast PF1A Branch currents from 13 to 12 chars to match actual shot tree names.

### Rev 18 by RJM 06JAN2004

Separated PF4/5 into PF4 and PF5.

### Rev 18.1 and 18.2 by RJM 09JAN2004

Added some missing PF4 channels.

### Rev 19 by PS 14July2004

1) Changed PF4Cur2 scale factor from 6ka/v to 1ka/v.  
2) Changed all PF4 references to RWM. In MDSplus duplicate tags will be used for the RWM signals (i.e. PF4 will also be used until applications are migrated to use RWM tag). In the far future there may be a new PF4 power supply section(s) at which time the PF4 tags will be separated from RWM.

### Rev 20 by RJM 07MAR2005

Separated RWM and PF4 power supply sections, and renamed EPICS and MDSplus names, as appropriate.

### Rev 21 by PS 24MAR2005

Added SDS signals for RWM (per Cori).

### Rev 22 by RJM 28MAR2005 (color changes by PS 29MAR2005)

Added SDS Fast signals for RWM crt 22, slit 19, Chan 9 and 10

### Rev 23 by ps 28APR2005

Added SPA digitizer in crate 16.

### Rev 24 by RJM 11 May2005

Added SPA Scale Factors for crate 16

### Rev 25 by PS on 03March 2006

Documented use of channel 25 (C=42, Slot=8) for Fast/Slow monitoring

### Rev 26 by PS on 21MAY2008

Corrected PF1U PSS MDS node names

### Rev 27 by PS on 28JAN2010

At RJM's request, removed 908's C=17, N=4 and 9  
Sichta req that N=17 also be removed.  
These 908's were 'fast' digitizers that nobody looks at (as far as we know). The sigs are also 'slow' dig'd.

### Rev 28 by PS on 14FEB2012

908 in C17 N17 reassigned to PF4/5 weld stress signals (circa March 2010)

### Rev 29 by PS 15FEB2013

PF4/5 weld stress signals removed from 908 C17 N17. Digitizer no longer needed.

### Rev 30 by jd 13Nov2014

Crates 1 & 4 Removed

### Rev 31 20FEB2015 PS

Added crate 2 for TF and D-Tacqs to replace crates 22 and 42.

### Rev 33 04MAY2015

Changed PF2U CUR2 from 5000 to 2500

### Rev 34 08SEP2015

Sichta Added SPA D-Tacq spa-dtaoq1 and SPA CAMAC C37. Mozulay corrected SPA scaling factors.

### R35 22SEP2015

Sichta made SPA1 charging current naming and scaling corrections.

### R36 19OCT2015

Sichta made SPA2 su4-5-6\_ref scaling corrections (from 1 to 2).

### R37 09NOV015

Sichta added test cell RWM digitizer.

### R38 12FEB2016

Sichta added 908c18n16 for hcs plc