

LASER INTERFEROMETER GRAVITATIONAL WAVE OBSERVATORY
- LIGO -
CALIFORNIA INSTITUTE OF TECHNOLOGY
MASSACHUSETTS INSTITUTE OF TECHNOLOGY

Technical Note	LIGO-T990032-00 - D	2/18/99
LIGO Channel Count Update		
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This is an internal working note
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Channel sampled by ADCU-3 and ADCU-4 (2K)

PSL Channels:

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H2:PSL-REFCAV_I	int16	16384	reference cavity, I phase
H2:PSL-REFCAV_DC	int16	16	reference cavity, dc signal
H2:PSL-REFCAV_TRANS	int16	16	reference cavity, ransmitted signal
H2:PSL-PMC_I	int16	16384	pre-mode cleaner, I phase
H2:PSL-PMC_L	int16	2048	pre-mode cleaner, length control
H2:PSL-PMC_DC	int16	16	pre-mode cleaner, dc signal
H2:PSL-PMC_TRANS	int16	16	pre-mode cleaner, transmitted signal
H2:PSL-PWR_1	int16	16384	laser power, photo diode before MC
H2:PSL-PWR_2	int16	16384	laser power, control signal
H2:PSL-PWR_MC1	int16	16384	laser power, photo diode 1 after MC (inside loop)
H2:PSL-PWR_MC2	int16	16384	laser power, photo diode 2 after MC (outside loop)
H2:PSL-EOM_F	int16	16384	laser frequency control signal, EOM
H2:PSL-NPRO_TEMP	int16	256	laser frequency control signal, slow
H2:PSL-NPRO_PZT	int16	16384	laser frequency control signal, fast

IOO Channels:

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H2:IOO-WFS1_P	int16	2048	Mode cleaner WFS 1, Pitch error signal
H2:IOO-WFS1_Y	int16	2048	Mode cleaner WFS 1, Yaw error signal
H2:IOO-WFS2_P	int16	2048	Mode cleaner WFS 2, Pitch error signal
H2:IOO-WFS2_Y	int16	2048	Mode cleaner WFS 2, Yaw error signal
H2:IOO-WFS1_DCP	int16	2048	Mode cleaner WFS 1, DC output in pitch
H2:IOO-WFS1_DCY	int16	2048	Mode cleaner WFS 1, DC output in yaw
H2:IOO-WFS2_DCP	int16	2048	Mode cleaner WFS 2, DC output in pitch
H2:IOO-WFS2_DCY	int16	2048	Mode cleaner WFS 2, DC output in yaw
H2:IOO-IB1_1	int16	256	Input beam PZT 1, control signal 1
H2:IOO-IB1_2	int16	256	Input beam PZT 1, control signal 2
H2:IOO-IB1_3	int16	256	Input beam PZT 1, control signal 3

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H2:IOO-IB2_1	int16	256	Input beam PZT 2, control signal 1
H2:IOO-IB2_2	int16	256	Input beam PZT 2, control signal 2
H2:IOO-IB2_3	int16	256	Input beam PZT 2, control signal 3
H2:IOO-MC_I	int16	16384	Mode cleaner length/freq sensor, I-phase error sig
H2:IOO-MC_L	int16	256	Mode cleaner length control signal
H2:IOO-MC_F	int16	16384	MC freq control signal (input to PSL wideband input)
H2:IOO-MC_TO1	int16	16384	MC length/freq servo test out 1 (after main sum junc)
H2:IOO-MC_TO2	int16	16384	MC length/freq servo test out 2 (before servo split)

ASC Channels:

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H2:ASC-WFS1_DCP	int16	16	wavefront sensor 1, DC output in pitch
H2:ASC-WFS1_DCY	int16	16	wavefront sensor 1, DC output in yaw
H2:ASC-WFS2_DCP	int16	16	wavefront sensor 2, DC output in pitch
H2:ASC-WFS2_DCY	int16	16	wavefront sensor 2, DC output in yaw
H2:ASC-WFS3_DCP	int16	2048	wavefront sensor 3, DC output in pitch
H2:ASC-WFS3_DCY	int16	2048	wavefront sensor 3, DC output in yaw
H2:ASC-WFS4_DCP	int16	2048	wavefront sensor 4, DC output in pitch
H2:ASC-WFS4_DCY	int16	2048	wavefront sensor 4, DC output in yaw
H2:ASC-WFS5_DCP	int16	16	wavefront sensor 5, DC output in pitch
H2:ASC-WFS5_DCY	int16	16	wavefront sensor 5, DC output in yaw

LSC Channels:

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H2:LSC-AS1_Q	int16	2048	Antisymmetric port LSC PD 1, Q-phase demod output
H2:LSC-AS1_I	int16	2048	Antisymmetric port LSC PD 1, I-phase demod output
H2:LSC-AS2_Q	int16	2048	Antisymmetric port LSC PD 2, Q-phase demod output
H2:LSC-AS2_I	int16	2048	Antisymmetric port LSC PD 2, I-phase demod output
H2:LSC-AS3_Q	int16	2048	Antisymmetric port LSC PD 3, Q-phase demod output
H2:LSC-AS3_I	int16	2048	Antisymmetric port LSC PD 3, I-phase demod output
H2:LSC-AS4_Q	int16	2048	Antisymmetric port LSC PD 4, Q-phase demod output
H2:LSC-AS4_I	int16	2048	Antisymmetric port LSC PD 4, I-phase demod output

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H2:LSC-AS_AC	int16	16384	Antisymmetric port AC signal, fast monitor, PD sum
H2:LSC-REF_AC	int16	16384	Reflected port AC signal, fast monitor
H2:LSC-POY_AC	int16	16384	Y Pick-Off port AC signal, fast monitor
H2:LSC-AS1_DC	int16	16	Antisymmetric PD1 DC signal, slow monitor
H2:LSC-AS2_DC	int16	16	Antisymmetric PD2 DC signal, slow monitor
H2:LSC-AS3_DC	int16	16	Antisymmetric PD3 DC signal, slow monitor
H2:LSC-AS4_DC	int16	16	Antisymmetric PD4 DC signal, slow monitor
H2:LSC-REF_DC	int16	16	Reflected port DC signal, slow monitor
H2:LSC-POX_DC	int16	16	X Pick-Off port DC signal, slow monitor
H2:LSC-POY_DC	int16	16	Y Pick-Off port DC signal, slow monitor
H2:LSC-POBS_DC	int16	16	Beamsplitter-ghost port DC signal, slow monitor
H2:LSC-MC_AO	int16	16384	Frequency control signal to MC additive offset input
H2:LSC-MC_L	int16	256	Frequency control signal to MC length input
H2:LSC-MOD_AC	int16	16384	Main phase modulation amplitude monitor

PEM Channels:

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H0:PEM-PSL2_ACCX	int16	2048	accelerometer, PSL 2K, X direction
H0:PEM-PSL2_ACCY	int16	2048	accelerometer, PSL 2K, Y direction
H0:PEM-PSL2_ACCZ	int16	2048	accelerometer, PSL 2K, Z direction
H0:PEM-HAM7_ACCX	int16	2048	accelerometer, HAM 7, X direction
H0:PEM-HAM7_ACCY	int16	2048	accelerometer, HAM 7, Y direction
H0:PEM-HAM7_ACCZ	int16	2048	accelerometer, HAM 7, Z direction
H0:PEM-HAM8_ACCX	int16	2048	accelerometer, HAM 8, X direction
H0:PEM-HAM8_ACCY	int16	2048	accelerometer, HAM 8, Y direction
H0:PEM-HAM8_ACCZ	int16	2048	accelerometer, HAM 8, Z direction
H0:PEM-HAM9_ACCX	int16	2048	accelerometer, HAM 9, X direction
H0:PEM-HAM9_ACCY	int16	2048	accelerometer, HAM 9, Y direction
H0:PEM-HAM9_ACCZ	int16	2048	accelerometer, HAM 9, Z direction
H0:PEM-HAM10_ACCX	int16	2048	accelerometer, HAM 10, X direction
H0:PEM-HAM10_ACCY	int16	2048	accelerometer, HAM 10, Y direction
H0:PEM-HAM10_ACCZ	int16	2048	accelerometer, HAM 10, Z direction
H0:PEM-BSC4_ACCX	int16	2048	accelerometer, BSC 4, X direction
H0:PEM-BSC4_ACCY	int16	2048	accelerometer, BSC 4, Y direction

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H0:PEM-BSC4_ACCZ	int16	2048	accelerometer, BSC 4, Z direction
H0:PEM-BSC7_ACCX	int16	2048	accelerometer, BSC 7, X direction
H0:PEM-BSC7_ACCY	int16	2048	accelerometer, BSC 7, Y direction
H0:PEM-BSC7_ACCZ	int16	2048	accelerometer, BSC 7, Z direction
H0:PEM-BSC8_ACCX	int16	2048	accelerometer, BSC 8, X direction
H0:PEM-BSC8_ACCY	int16	2048	accelerometer, BSC 8, Y direction
H0:PEM-BSC8_ACCZ	int16	2048	accelerometer, BSC 8, Z direction
H0:PEM-BSC1_ACC1X	int16	2048	accelerometer 1, BSC 1, X direction
H0:PEM-BSC1_ACC1Y	int16	2048	accelerometer 1, BSC 1, Y direction
H0:PEM-BSC1_ACC1Z	int16	2048	accelerometer 1, BSC 1, Z direction
H0:PEM-BSC1_ACC2X	int16	2048	accelerometer 2, BSC 1, X direction
H0:PEM-BSC1_ACC2Y	int16	2048	accelerometer 2, BSC 1, Y direction
H0:PEM-BSC1_ACC2Z	int16	2048	accelerometer 2, BSC 1, Z direction
H0:PEM-PSL2_MIC	int16	2048	microphone, PSL 2K
H0:PEM-HAM7_MIC	int16	2048	microphone, HAM 7
H0:PEM-HAM8_MIC	int16	2048	microphone, HAM 8
H0:PEM-HAM9_MIC	int16	2048	microphone, HAM 9
H0:PEM-HAM10_MIC	int16	2048	microphone, HAM 10
H0:PEM-BSC4_MIC	int16	2048	microphone, BSC 4
H0:PEM-BSC7_MIC	int16	2048	microphone, BSC 7
H0:PEM-BSC3_MIC	int16	2048	microphone, BSC 3
H0:PEM-BSC8_MIC	int16	2048	microphone, BSC 8
H0:PEM-BSC1_MIC	int16	2048	microphone, BSC 1
H0:PEM-LVEA_SEISX	int16	256	seismometer, LVEA, X direction
H0:PEM-LVEA_SEISY	int16	256	seismometer, LVEA, Y direction
H0:PEM-LVEA_SEISZ	int16	256	seismometer, LVEA, Z direction
H0:PEM-LVEA_TILTX	int16	256	tiltmeter, LVEA, X direction
H0:PEM-LVEA_TILTY	int16	256	tiltmeter, LVEA, Y direction
H0:PEM-LVEA_TEMP6	int16	16	tiltmeter, LVEA, temperature
H0:PEM-LVEA2_NBRF	int16	16384	narrow band rf receiver, 2K

GDS Channels:

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H2:GDS-GPS_RAMP2	int16	16384	GPS ramp timing signal, ADCU 3
H2:GDS-GPS_TRIG2	int16	16384	GPS trigger signal, ADCU 3

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H2:GDS-DAC1	int16	16384	excitation readback, DAC chn. 0-15
H2:GDS-DAC2	int16	16384	excitation readback, DAC chn. 16-31
H0:GDS-LVEA2_TO1	int16	16384	temporary test output 1, LVEA 2K
H0:GDS-LVEA2_TO2	int16	16384	temporary test output 2, LVEA 2K
H0:GDS-LVEA2_TO3	int16	16384	temporary test output 3, LVEA 2K
H0:GDS-LVEA2_TO4	int16	16384	temporary test output 4, LVEA 2K
H0:GDS-LVEA2_TO5	int16	2048	temporary test output 5, LVEA 2K
H0:GDS-LVEA2_TO6	int16	2048	temporary test output 6, LVEA 2K
H0:GDS-LVEA2_TO7	int16	2048	temporary test output 7, LVEA 2K
H0:GDS-LVEA2_TO8	int16	2048	temporary test output 8, LVEA 2K
H0:GDS-LVEA2_TO9	int16	2048	temporary test output 9, LVEA 2K
H0:GDS-LVEA2_TO10	int16	2048	temporary test output 10, LVEA 2K
H0:GDS-LVEA2_TO11	int16	2048	temporary test output 11, LVEA 2K
H0:GDS-LVEA2_TO12	int16	2048	temporary test output 12, LVEA 2K
H0:GDS-LVEA2_TO13	int16	2048	temporary test output 13, LVEA 2K
H0:GDS-LVEA2_TO14	int16	2048	temporary test output 14, LVEA 2K
H0:GDS-LVEA2_TO15	int16	2048	temporary test output 15, LVEA 2K
H0:GDS-LVEA2_TO16	int16	2048	temporary test output 16, LVEA 2K
H0:GDS-LVEA2_TO17	int16	2048	temporary test output 17, LVEA 2K
H0:GDS-LVEA2_TO18	int16	2048	temporary test output 18, LVEA 2K
H0:GDS-LVEA2_TO19	int16	2048	temporary test output 19, LVEA 2K
H0:GDS-LVEA2_TO20	int16	2048	temporary test output 20, LVEA 2K

Channel sampled by ADCU-1 and ADCU-2 (2K)

SUS Channels:

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H2:SUS-SM1_COIL1	int16	2048	suspension coil read-back, SM1, upper left
H2:SUS-SM1_COIL2	int16	2048	suspension coil read-back, SM1, upper right
H2:SUS-SM1_COIL3	int16	2048	suspension coil read-back, SM1, lower left
H2:SUS-SM1_COIL4	int16	2048	suspension coil read-back, SM1, lower right

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H2:SUS-SM1_COIL5	int16	2048	suspension coil read-back, SM1, side
H2:SUS-SM1_COIL6	int16	16384	suspension coil read-back, SM1, sum
H2:SUS-SM1_SENS1	int16	256	suspension sensor, SM1, upper left
H2:SUS-SM1_SENS2	int16	256	suspension sensor, SM1, upper right
H2:SUS-SM1_SENS3	int16	256	suspension sensor, SM1, lower left
H2:SUS-SM1_SENS4	int16	256	suspension sensor, SM1, lower right
H2:SUS-SM1_SENS5	int16	256	suspension sensor, SM1, side
H2:SUS-SM2_COIL1	int16	2048	suspension coil read-back, SM2, upper left
H2:SUS-SM2_COIL2	int16	2048	suspension coil read-back, SM2, upper right
H2:SUS-SM2_COIL3	int16	2048	suspension coil read-back, SM2, lower left
H2:SUS-SM2_COIL4	int16	2048	suspension coil read-back, SM2, lower right
H2:SUS-SM2_COIL5	int16	2048	suspension coil read-back, SM2, side
H2:SUS-SM2_COIL6	int16	16384	suspension coil read-back, SM2, sum
H2:SUS-SM2_SENS1	int16	256	suspension sensor, SM2, upper left
H2:SUS-SM2_SENS2	int16	256	suspension sensor, SM2, upper right
H2:SUS-SM2_SENS3	int16	256	suspension sensor, SM2, lower left
H2:SUS-SM2_SENS4	int16	256	suspension sensor, SM2, lower right
H2:SUS-SM2_SENS5	int16	256	suspension sensor, SM2, side
H2:SUS-MC1_COIL1	int16	2048	suspension coil read-back, MC1, upper left
H2:SUS-MC1_COIL2	int16	2048	suspension coil read-back, MC1, upper right
H2:SUS-MC1_COIL3	int16	2048	suspension coil read-back, MC1, lower left
H2:SUS-MC1_COIL4	int16	2048	suspension coil read-back, MC1, lower right
H2:SUS-MC1_COIL5	int16	2048	suspension coil read-back, MC1, side
H2:SUS-MC1_COIL6	int16	16384	suspension coil read-back, MC1, sum
H2:SUS-MC1_SENS1	int16	256	suspension sensor, MC1, upper left
H2:SUS-MC1_SENS2	int16	256	suspension sensor, MC1, upper right
H2:SUS-MC1_SENS3	int16	256	suspension sensor, MC1, lower left
H2:SUS-MC1_SENS4	int16	256	suspension sensor, MC1, lower right
H2:SUS-MC1_SENS5	int16	256	suspension sensor, MC1, side
H2:SUS-MC2_COIL1	int16	2048	suspension coil read-back, MC2, upper left
H2:SUS-MC2_COIL2	int16	2048	suspension coil read-back, MC2, upper right
H2:SUS-MC2_COIL3	int16	2048	suspension coil read-back, MC2, lower left
H2:SUS-MC2_COIL4	int16	2048	suspension coil read-back, MC2, lower right
H2:SUS-MC2_COIL5	int16	2048	suspension coil read-back, MC2, side
H2:SUS-MC2_COIL6	int16	16384	suspension coil read-back, MC2, sum
H2:SUS-MC2_SENS1	int16	256	suspension sensor, MC2, upper left

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H2:SUS-MC2_SENS2	int16	256	suspension sensor, MC2, upper right
H2:SUS-MC2_SENS3	int16	256	suspension sensor, MC2, lower left
H2:SUS-MC2_SENS4	int16	256	suspension sensor, MC2, lower right
H2:SUS-MC2_SENS5	int16	256	suspension sensor, MC2, side
H2:SUS-MC3_COIL1	int16	2048	suspension coil read-back, MC3, upper left
H2:SUS-MC3_COIL2	int16	2048	suspension coil read-back, MC3, upper right
H2:SUS-MC3_COIL3	int16	2048	suspension coil read-back, MC3, lower left
H2:SUS-MC3_COIL4	int16	2048	suspension coil read-back, MC3, lower right
H2:SUS-MC3_COIL5	int16	2048	suspension coil read-back, MC3, side
H2:SUS-MC3_COIL6	int16	16384	suspension coil read-back, MC3, sum
H2:SUS-MC3_SENS1	int16	256	suspension sensor, MC3, upper left
H2:SUS-MC3_SENS2	int16	256	suspension sensor, MC3, upper right
H2:SUS-MC3_SENS3	int16	256	suspension sensor, MC3, lower left
H2:SUS-MC3_SENS4	int16	256	suspension sensor, MC3, lower right
H2:SUS-MC3_SENS5	int16	256	suspension sensor, MC3, side
H2:SUS-MMT1_COIL1	int16	2048	suspension coil read-back, MMT1, upper left
H2:SUS-MMT1_COIL2	int16	2048	suspension coil read-back, MMT1, upper right
H2:SUS-MMT1_COIL3	int16	2048	suspension coil read-back, MMT1, lower left
H2:SUS-MMT1_COIL4	int16	2048	suspension coil read-back, MMT1, lower right
H2:SUS-MMT1_COIL5	int16	2048	suspension coil read-back, MMT1, side
H2:SUS-MMT1_COIL6	int16	16384	suspension coil read-back, MMT1, sum
H2:SUS-MMT1_SENS1	int16	256	suspension sensor, MMT1, upper left
H2:SUS-MMT1_SENS2	int16	256	suspension sensor, MMT1, upper right
H2:SUS-MMT1_SENS3	int16	256	suspension sensor, MMT1, lower left
H2:SUS-MMT1_SENS4	int16	256	suspension sensor, MMT1, lower right
H2:SUS-MMT1_SENS5	int16	256	suspension sensor, MMT1, side
H2:SUS-MMT2_COIL1	int16	2048	suspension coil read-back, MMT2, upper left
H2:SUS-MMT2_COIL2	int16	2048	suspension coil read-back, MMT2, upper right
H2:SUS-MMT2_COIL3	int16	2048	suspension coil read-back, MMT2, lower left
H2:SUS-MMT2_COIL4	int16	2048	suspension coil read-back, MMT2, lower right
H2:SUS-MMT2_COIL5	int16	2048	suspension coil read-back, MMT2, side
H2:SUS-MMT2_COIL6	int16	16384	suspension coil read-back, MMT2, sum
H2:SUS-MMT2_SENS1	int16	256	suspension sensor, MMT2, upper left
H2:SUS-MMT2_SENS2	int16	256	suspension sensor, MMT2, upper right
H2:SUS-MMT2_SENS3	int16	256	suspension sensor, MMT2, lower left
H2:SUS-MMT2_SENS4	int16	256	suspension sensor, MMT2, lower right

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H2:SUS-MMT2_SENS5	int16	256	suspension sensor, MMT2, side
H2:SUS-MMT3_COIL1	int16	2048	suspension coil read-back, MMT3, upper left
H2:SUS-MMT3_COIL2	int16	2048	suspension coil read-back, MMT3, upper right
H2:SUS-MMT3_COIL3	int16	2048	suspension coil read-back, MMT3, lower left
H2:SUS-MMT3_COIL4	int16	2048	suspension coil read-back, MMT3, lower right
H2:SUS-MMT3_COIL5	int16	2048	suspension coil read-back, MMT3, side
H2:SUS-MMT3_COIL6	int16	16384	suspension coil read-back, MMT3, sum
H2:SUS-MMT3_SENS1	int16	256	suspension sensor, MMT3, upper left
H2:SUS-MMT3_SENS2	int16	256	suspension sensor, MMT3, upper right
H2:SUS-MMT3_SENS3	int16	256	suspension sensor, MMT3, lower left
H2:SUS-MMT3_SENS4	int16	256	suspension sensor, MMT3, lower right
H2:SUS-MMT3_SENS5	int16	256	suspension sensor, MMT3, side
H2:SUS-RM_COIL1	int16	2048	suspension coil read-back, RM, upper left
H2:SUS-RM_COIL2	int16	2048	suspension coil read-back, RM, upper right
H2:SUS-RM_COIL3	int16	2048	suspension coil read-back, RM, lower left
H2:SUS-RM_COIL4	int16	2048	suspension coil read-back, RM, lower right
H2:SUS-RM_COIL5	int16	2048	suspension coil read-back, RM, side
H2:SUS-RM_COIL6	int16	16384	suspension coil read-back, RM, sum
H2:SUS-RM_SENS1	int16	256	suspension sensor, RM, upper left
H2:SUS-RM_SENS2	int16	256	suspension sensor, RM, upper right
H2:SUS-RM_SENS3	int16	256	suspension sensor, RM, lower left
H2:SUS-RM_SENS4	int16	256	suspension sensor, RM, lower right
H2:SUS-RM_SENS5	int16	256	suspension sensor, RM, side
H2:SUS-BS_COIL1	int16	2048	suspension coil read-back, BS, upper left
H2:SUS-BS_COIL2	int16	2048	suspension coil read-back, BS, upper right
H2:SUS-BS_COIL3	int16	2048	suspension coil read-back, BS, lower left
H2:SUS-BS_COIL4	int16	2048	suspension coil read-back, BS, lower right
H2:SUS-BS_COIL5	int16	2048	suspension coil read-back, BS, side
H2:SUS-BS_COIL6	int16	16384	suspension coil read-back, BS, sum
H2:SUS-BS_SENS1	int16	256	suspension sensor, BS, upper left
H2:SUS-BS_SENS2	int16	256	suspension sensor, BS, upper right
H2:SUS-BS_SENS3	int16	256	suspension sensor, BS, lower left
H2:SUS-BS_SENS4	int16	256	suspension sensor, BS, lower right
H2:SUS-BS_SENS5	int16	256	suspension sensor, BS, side
H2:SUS-FMX_COIL1	int16	2048	suspension coil read-back, FMX, upper left
H2:SUS-FMX_COIL2	int16	2048	suspension coil read-back, FMX, upper right

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H2:SUS-FMX_COIL3	int16	2048	suspension coil read-back, FMX, lower left
H2:SUS-FMX_COIL4	int16	2048	suspension coil read-back, FMX, lower right
H2:SUS-FMX_COIL5	int16	2048	suspension coil read-back, FMX, side
H2:SUS-FMX_COIL6	int16	16384	suspension coil read-back, FMX, sum
H2:SUS-FMX_SENS1	int16	256	suspension sensor, FMX, upper left
H2:SUS-FMX_SENS2	int16	256	suspension sensor, FMX, upper right
H2:SUS-FMX_SENS3	int16	256	suspension sensor, FMX, lower left
H2:SUS-FMX_SENS4	int16	256	suspension sensor, FMX, lower right
H2:SUS-FMX_SENS5	int16	256	suspension sensor, FMX, side
H2:SUS-FMY_COIL1	int16	2048	suspension coil read-back, FMY, upper left
H2:SUS-FMY_COIL2	int16	2048	suspension coil read-back, FMY, upper right
H2:SUS-FMY_COIL3	int16	2048	suspension coil read-back, FMY, lower left
H2:SUS-FMY_COIL4	int16	2048	suspension coil read-back, FMY, lower right
H2:SUS-FMY_COIL5	int16	2048	suspension coil read-back, FMY, side
H2:SUS-FMY_COIL6	int16	16384	suspension coil read-back, FMY, sum
H2:SUS-FMY_SENS1	int16	256	suspension sensor, FMY, upper left
H2:SUS-FMY_SENS2	int16	256	suspension sensor, FMY, upper right
H2:SUS-FMY_SENS3	int16	256	suspension sensor, FMY, lower left
H2:SUS-FMY_SENS4	int16	256	suspension sensor, FMY, lower right
H2:SUS-FMY_SENS5	int16	256	suspension sensor, FMY, side
H2:SUS-ITMX_COIL1	int16	2048	suspension coil read-back, ITMX, upper left
H2:SUS-ITMX_COIL2	int16	2048	suspension coil read-back, ITMX, upper right
H2:SUS-ITMX_COIL3	int16	2048	suspension coil read-back, ITMX, lower left
H2:SUS-ITMX_COIL4	int16	2048	suspension coil read-back, ITMX, lower right
H2:SUS-ITMX_COIL5	int16	2048	suspension coil read-back, ITMX, side
H2:SUS-ITMX_COIL6	int16	16384	suspension coil read-back, ITMX, sum
H2:SUS-ITMX_SENS1	int16	256	suspension sensor, ITMX, upper left
H2:SUS-ITMX_SENS2	int16	256	suspension sensor, ITMX, upper right
H2:SUS-ITMX_SENS3	int16	256	suspension sensor, ITMX, lower left
H2:SUS-ITMX_SENS4	int16	256	suspension sensor, ITMX, lower right
H2:SUS-ITMX_SENS5	int16	256	suspension sensor, ITMX, side
H2:SUS-ITMY_COIL1	int16	2048	suspension coil read-back, ITMY, upper left
H2:SUS-ITMY_COIL2	int16	2048	suspension coil read-back, ITMY, upper right
H2:SUS-ITMY_COIL3	int16	2048	suspension coil read-back, ITMY, lower left
H2:SUS-ITMY_COIL4	int16	2048	suspension coil read-back, ITMY, lower right
H2:SUS-ITMY_COIL5	int16	2048	suspension coil read-back, ITMY, side

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H2:SUS-ITMY_COIL6	int16	16384	suspension coil read-back, ITMY, sum
H2:SUS-ITMY_SENS1	int16	256	suspension sensor, ITMY, upper left
H2:SUS-ITMY_SENS2	int16	256	suspension sensor, ITMY, upper right
H2:SUS-ITMY_SENS3	int16	256	suspension sensor, ITMY, lower left
H2:SUS-ITMY_SENS4	int16	256	suspension sensor, ITMY, lower right
H2:SUS-ITMY_SENS5	int16	256	suspension sensor, ITMY, side

GDS Channels:

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H2:GDS-GPS_RAMP1	int16	16384	GPS ramp timing signal, ADCU 1
H2:GDS-GPS_TRIG1	int16	16384	GPS trigger signal, ADCU 1

Channel provide by DDCU LSC/ASC (2K)

LSC Channels:

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H2:LSC-GW	float	16384	gravitational wave signal
H2:LSC-AS_I	float	16384	antisymmetric port, I phase
H2:LSC-REF_I	float	16384	reflection port, I phase
H2:LSC-REF_Q	float	16384	reflection port, Q phase
H2:LSC-POX_Q	float	16384	pick-off, ITM X, Q phase
H2:LSC-POX_I	float	16384	pick-off, ITM X, I phase
H2:LSC-DARM	float	16384	differential arm control signal
H2:LSC-CARM	float	16384	common arm control signal
H2:LSC-MICH	float	16384	Michelson control signal
H2:LSC-REC	float	16384	recycling cavity control signal
H2:LSC-TIDE	EPICS		tidal correction

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ASC Channels:

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H2:ASC-WFS1_QY	float	2048	wavefront sensor 1, Q phase, yaw
H2:ASC-WFS1_QP	float	2048	wavefront sensor 1, Q phase, pitch
H2:ASC-WFS2_IY	float	2048	wavefront sensor 2, I phase, yaw
H2:ASC-WFS2_IP	float	2048	wavefront sensor 2, I phase, pitch
H2:ASC-WFS2_QY	float	2048	wavefront sensor 2, Q phase, yaw
H2:ASC-WFS2_QP	float	2048	wavefront sensor 2, Q phase, pitch
H2:ASC-WFS3_IY	float	2048	wavefront sensor 3, I phase, yaw
H2:ASC-WFS3_IP	float	2048	wavefront sensor 3, I phase, pitch
H2:ASC-WFS4_IY	float	2048	wavefront sensor 4, I phase, yaw
H2:ASC-WFS4_IP	float	2048	wavefront sensor 4, I phase, pitch
H2:ASC-QPDX_Y	float	2048	quadrant monitor, X arm, yaw
H2:ASC-QPDX_P	float	2048	quadrant monitor, X arm, pitch
H2:ASC-QPDX_SUM	float	2048	quadrant monitor, X arm, sum
H2:ASC-QPDY_Y	float	2048	quadrant monitor, Y arm, yaw
H2:ASC-QPDY_P	float	2048	quadrant monitor, Y arm, pitch
H2:ASC-QPDY_SUM	float	2048	quadrant monitor, Y arm, sum
H2:ASC-ETMX_Y	int16	2048	ETMX control signal, yaw
H2:ASC-ETMX_P	int16	2048	ETMX control signal, pitch
H2:ASC-ETMY_Y	int16	2048	ETMY control signal, yaw
H2:ASC-ETMY_P	int16	2048	ETMY control signal, pitch
H2:ASC-ITMX_Y	int16	2048	ITMX control signal, yaw
H2:ASC-ITMX_P	int16	2048	ITMX control signal, pitch
H2:ASC-ITMY_Y	int16	2048	ITMY control signal, yaw
H2:ASC-ITMY_P	int16	2048	ITMY control signal, pitch
H2:ASC-RM_Y	int16	2048	RM control signal, yaw
H2:ASC-RM_P	int16	2048	RM control signal, pitch
H2:ASC-BS_Y	int16	2048	BS control signal, yaw
H2:ASC-BS_P	int16	2048	BS control signal, pitch
H2:ASC-IB_Y	int16	2048	IB control signal, yaw
H2:ASC-IB_P	int16	2048	IB control signal, pitch

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DAC channels used by GDS excitation (2K)

LVEA

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H2:LSC-MOD_1_EXC	DAC	16384	LF modulation of RF resonant sidebands
H2:LSC-MOD_2_EXC	DAC	16384	LF modulation of RF non-resonant sidebands
H2:LSC-MOD_3_EXC	DAC	16384	LF modulation of RF MC sidebands
H2:IOO-MC_I_EXC	DAC	16384	mode cleaner error signal offset
H2:IOO-MC_L_EXC	DAC	16384	mode cleaner length offset
H2:IOO-MC_1_EXC	DAC	16384	mode cleaner, after servo split, MC path
H2:IOO-MC_2_EXC	DAC	16384	mode cleaner, after servo split, PSL path
H2:IOO-MMT1_EXC	DAC	16384	mode matching mirror 1, offset
H2:IOO-MMT2_EXC	DAC	16384	mode matching mirror 2, offset
H2:IOO-MMT3_EXC	DAC	16384	mode matching mirror 3, offset
H2:IOO-WFS1_P_EXC	DAC	16384	mode cleaner WFS 1, pitch offset
H2:IOO-WFS1_Y_EXC	DAC	16384	mode cleaner WFS 1, yaw offset
H2:IOO-WFS2_P_EXC	DAC	16384	mode cleaner WFS 2, pitch offset
H2:IOO-WFS2_Y_EXC	DAC	16384	mode cleaner WFS 2, yaw offset
H2:IOO-IB1_P_EXC	DAC	16384	input beam PZT 1, pitch offset
H2:IOO-IB1_Y_EXC	DAC	16384	input beam PZT 1, yaw offset
H2:IOO-IB2_P_EXC	DAC	16384	input beam PZT 2, pitch offset
H2:IOO-IB2_Y_EXC	DAC	16384	input beam PZT 2, yaw offset
H2:PSL-AOM_F_EXC	DAC	16384	acousto-optical modulator, frequency offset
H2:PSL-PWR_1_EXC	DAC	16384	power stabilization, intensity offset
H2:PSL-PMC_I_EXC	DAC	16384	pre-mode cleaner, error signal offset
H0:GDS-LVEA2_TI1_EXC	DAC	16384	temporary test input 1, LVEA 2K
H0:GDS-LVEA2_TI2_EXC	DAC	16384	temporary test input 2, LVEA 2K
H0:GDS-LVEA2_TI3_EXC	DAC	16384	temporary test input 3, LVEA 2K
H0:GDS-LVEA2_TI4_EXC	DAC	16384	temporary test input 4, LVEA 2K

MID X

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H2:LSC-ETMX_CAL_EXC	DAC	16384	calibration excitation, ETM X
H0:GDS-MX_TI1_EXC	DAC	16384	temporary test input 1, mid X

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H0:GDS-MX_TI2_EXC DAC 16384 temporary test input 2, mid X
H0:GDS-MX_TI1_EXC DAC 16384 temporary test input 3, mid X

MID Y
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H2:LSC-ETMY_CAL_EXC DAC 16384 calibration excitation, ETM Y
H0:GDS-MY_TI1_EXC DAC 16384 temporary test input 1, mid Y
H0:GDS-MY_TI2_EXC DAC 16384 temporary test input 2, mid Y
H0:GDS-MY_TI3_EXC DAC 16384 temporary test input 3, mid Y

END X
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H1:LSC-ETMX_CAL_EXC DAC 16384 calibration excitation, ETM X
H0:GDS-EX_TI1_EXC DAC 16384 temporary test input 1, end X
H0:GDS-EX_TI2_EXC DAC 16384 temporary test input 2, end X
H0:GDS-EX_TI3_EXC DAC 16384 temporary test input 3, end X

END Y
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H1:LSC-ETMY_CAL_EXC DAC 16384 calibration excitation, ETM Y
H0:GDS-EY_TI1_EXC DAC 16384 temporary test input 1, end Y
H0:GDS-EY_TI2_EXC DAC 16384 temporary test input 2, end Y
H0:GDS-EY_TI3_EXC DAC 16384 temporary test input 3, end Y

Testpoint channels used by LSC/ASC/GDS (2K)

H2:LSC-GW_EXC float 16384 gravitational wave signal, offset
H2:LSC-REF_I_EXC float 16384 reflection port signal, offset
H2:LSC-POX_I_EXC float 16384 pick-off signal, ITM X, I phase, offset
H2:LSC-POX_Q_EXC float 16384 pick-off signal, ITM X, Q phase, offset
H2:LSC-DARM_EXC float 16384 gravitational wave control signal, offset
H2:LSC-CARM_EXC float 16384 common arm control signal, test mass damping, offset

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H2:LSC-MICH1_EXC	float	16384	Michelson control signal, BS, offset
H2:LSC-MICH2_EXC	float	16384	Michelson control signal, test mass damping, offset
H2:LSC-MICH3_EXC	float	16384	Michelson control signal, differential correction, offset
H2:LSC-REC1_EXC	float	16384	recycling cavity control signal, RM, offset
H2:LSC-REC2_EXC	float	16384	recycling cavity control signal, test mass damping, offset
H2:LSC-ETMX_EXC	float	16384	control signal ETMX, offset
H2:LSC-ETMY_EXC	float	16384	control signal ETMY, offset
H2:LSC-ITMX_EXC	float	16384	control signal ITMX, offset
H2:LSC-ITMY_EXC	float	16384	control signal ITMY, offset
H2:LSC-RM_EXC	float	16384	control signal RM, offset
H2:LSC-BS_EXC	float	16384	control signal BS, offset
H2:LSC-GW_TO	float	16384	gravitational wave signal, after sum
H2:LSC-REF_I_TO	float	16384	reflection port signal, after sum
H2:LSC-POX_I_TO	float	16384	pick-off signal, ITM X, I phase, after sum
H2:LSC-POX_Q_TO	float	16384	pick-off signal, ITM X, Q phase, after sum
H2:LSC-MICH2_TO	float	16384	Michelson control signal, test mass damping, after sum
H2:LSC-MICH3_TO	float	16384	Michelson control signal, differential correction, after sum
H2:LSC-REC2_TO	float	16384	recycling cavity control signal, test mass damping, after sum
H2:LSC-ETMX_TO	float	16384	control signal ETMX, after sum
H2:LSC-ETMY_TO	float	16384	control signal ETMY, after sum
H2:LSC-ITMX_TO	float	16384	control signal ITMX, after sum
H2:LSC-ITMY_TO	float	16384	control signal ITMY, after sum
H2:LSC-RM_TO	float	16384	control signal RM, after sum
H2:LSC-BS_TO	float	16384	control signal BS, after sum
H2:LSC-POY_I	float	16384	pick-off signal, ITM Y, I phase
H2:LSC-POY_Q	float	16384	pick-off signal, ITM Y, Q phase
H2:ASC-WFS1_QY1_EXC	float	2048	wavefront sensor 1, Q phase, yaw, error signal offset
H2:ASC-WFS1_QP1_EXC	float	2048	wavefront sensor 1, Q phase, pitch, error signal offset
H2:ASC-WFS2_IY1_EXC	float	2048	wavefront sensor 2, I phase, yaw, error signal offset
H2:ASC-WFS2_IP1_EXC	float	2048	wavefront sensor 2, I phase, pitch, error signal offset
H2:ASC-WFS2_QY1_EXC	float	2048	wavefront sensor 2, Q phase, yaw, error signal offset
H2:ASC-WFS2_QP1_EXC	float	2048	wavefront sensor 2, Q phase, pitch, error signal offset
H2:ASC-WFS3_IY1_EXC	float	2048	wavefront sensor 3, I phase, yaw, error signal offset

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H2:ASC-WFS3_IP1_EXC	float	2048	wavefront sensor 3, I phase, pitch, error signal offset
H2:ASC-WFS4_IY1_EXC	float	2048	wavefront sensor 4, I phase, yaw, error signal offset
H2:ASC-WFS4_IP1_EXC	float	2048	wavefront sensor 4, I phase, pitch, error signal offset
H2:ASC-QPDX_Y1_EXC	float	2048	quadrant monitor, X arm, yaw, error signal offset
H2:ASC-QPDX_P1_EXC	float	2048	quadrant monitor, X arm, pitch, error signal offset
H2:ASC-QPDY_Y1_EXC	float	2048	quadrant monitor, Y arm, yaw, error signal offset
H2:ASC-QPDY_P1_EXC	float	2048	quadrant monitor, Y arm, pitch, error signal offset
H2:ASC-WFS1_QY2_EXC	float	2048	wavefront sensor 1, Q phase, yaw, control signal offset
H2:ASC-WFS1_QP2_EXC	float	2048	wavefront sensor 1, Q phase, pitch, control signal offset
H2:ASC-WFS2_IY2_EXC	float	2048	wavefront sensor 2, I phase, yaw, control signal offset
H2:ASC-WFS2_IP2_EXC	float	2048	wavefront sensor 2, I phase, pitch, control signal offset
H2:ASC-WFS2_QY2_EXC	float	2048	wavefront sensor 2, Q phase, yaw, control signal offset
H2:ASC-WFS2_QP2_EXC	float	2048	wavefront sensor 2, Q phase, pitch, control signal offset
H2:ASC-WFS3_IY2_EXC	float	2048	wavefront sensor 3, I phase, yaw, control signal offset
H2:ASC-WFS3_IP2_EXC	float	2048	wavefront sensor 3, I phase, pitch, control signal offset
H2:ASC-WFS4_IY2_EXC	float	2048	wavefront sensor 4, I phase, yaw, control signal offset
H2:ASC-WFS4_IP2_EXC	float	2048	wavefront sensor 4, I phase, pitch, control signal offset
H2:ASC-QPDX_Y2_EXC	float	2048	quadrant monitor, X arm, yaw, control signal offset
H2:ASC-QPDX_P2_EXC	float	2048	quadrant monitor, X arm, pitch, control signal offset
H2:ASC-QPDY_Y2_EXC	float	2048	quadrant monitor, Y arm, yaw, control signal offset
H2:ASC-QPDY_P2_EXC	float	2048	quadrant monitor, Y arm, pitch, control signal offset
H2:ASC-ETMX_Y_EXC	float	2048	ETMX control signal, yaw, offset
H2:ASC-ETMX_P_EXC	float	2048	ETMX control signal, pitch, offset
H2:ASC-ETMY_Y_EXC	float	2048	ETMY control signal, yaw, offset
H2:ASC-ETMY_P_EXC	float	2048	ETMY control signal, pitch, offset
H2:ASC-ITMX_Y_EXC	float	2048	ITMX control signal, yaw, offset
H2:ASC-ITMX_P_EXC	float	2048	ITMX control signal, pitch, offset
H2:ASC-ITMY_Y_EXC	float	2048	ITMY control signal, yaw, offset
H2:ASC-ITMY_P_EXC	float	2048	ITMY control signal, pitch, offset
H2:ASC-RM_Y_EXC	float	2048	RM control signal, yaw, offset
H2:ASC-RM_P_EXC	float	2048	RM control signal, pitch, offset
H2:ASC-BS_Y_EXC	float	2048	BS control signal, yaw, offset
H2:ASC-BS_P_EXC	float	2048	BS control signal, pitch, offset
H2:ASC-IB_Y_EXC	float	2048	IB control signal, yaw, offset
H2:ASC-IB_P_EXC	float	2048	IB control signal, pitch, offset

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H2:ASC-WFS1_I2	float	2048	wavefront sensor 1, right segment, I signal
H2:ASC-WFS1_I4	float	2048	wavefront sensor 1, left segment, I signal
H2:ASC-WFS1_I1	float	2048	wavefront sensor 1, top segment, I signal
H2:ASC-WFS1_I3	float	2048	wavefront sensor 1, bottom segment, I signal
H2:ASC-WFS1_Q2	float	2048	wavefront sensor 1, right segment, Q signal
H2:ASC-WFS1_Q4	float	2048	wavefront sensor 1, left segment, Q signal
H2:ASC-WFS1_Q1	float	2048	wavefront sensor 1, top segment, Q signal
H2:ASC-WFS1_Q3	float	2048	wavefront sensor 1, bottom segment, Q signal
H2:ASC-WFS2_I2	float	2048	wavefront sensor 2, right segment, I signal
H2:ASC-WFS2_I4	float	2048	wavefront sensor 2, left segment, I signal
H2:ASC-WFS2_I1	float	2048	wavefront sensor 2, top segment, I signal
H2:ASC-WFS2_I3	float	2048	wavefront sensor 2, bottom segment, I signal
H2:ASC-WFS2_Q2	float	2048	wavefront sensor 2, right segment, Q signal
H2:ASC-WFS2_Q4	float	2048	wavefront sensor 2, left segment, Q signal
H2:ASC-WFS2_Q1	float	2048	wavefront sensor 2, top segment, Q signal
H2:ASC-WFS2_Q3	float	2048	wavefront sensor 2, bottom segment, Q signal
H2:ASC-WFS3_I2	float	2048	wavefront sensor 3, right segment, I signal
H2:ASC-WFS3_I4	float	2048	wavefront sensor 3, left segment, I signal
H2:ASC-WFS3_I1	float	2048	wavefront sensor 3, top segment, I signal
H2:ASC-WFS3_I3	float	2048	wavefront sensor 3, bottom segment, I signal
H2:ASC-WFS3_Q2	float	2048	wavefront sensor 3, right segment, Q signal
H2:ASC-WFS3_Q4	float	2048	wavefront sensor 3, left segment, Q signal
H2:ASC-WFS3_Q1	float	2048	wavefront sensor 3, top segment, Q signal
H2:ASC-WFS3_Q3	float	2048	wavefront sensor 3, bottom segment, Q signal
H2:ASC-WFS4_I2	float	2048	wavefront sensor 4, right segment, I signal
H2:ASC-WFS4_I4	float	2048	wavefront sensor 4, left segment, I signal
H2:ASC-WFS4_I1	float	2048	wavefront sensor 4, top segment, I signal
H2:ASC-WFS4_I3	float	2048	wavefront sensor 4, bottom segment, I signal
H2:ASC-WFS4_Q2	float	2048	wavefront sensor 4, right segment, Q signal
H2:ASC-WFS4_Q4	float	2048	wavefront sensor 4, left segment, Q signal
H2:ASC-WFS4_Q1	float	2048	wavefront sensor 4, top segment, Q signal
H2:ASC-WFS4_Q3	float	2048	wavefront sensor 4, bottom segment, Q signal
H2:ASC-WFS5_I2	float	2048	wavefront sensor 5, right segment, I signal
H2:ASC-WFS5_I4	float	2048	wavefront sensor 5, left segment, I signal
H2:ASC-WFS5_I1	float	2048	wavefront sensor 5, top segment, I signal
H2:ASC-WFS5_I3	float	2048	wavefront sensor 5, bottom segment, I signal

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H2:ASC-WFS5_Q2	float	2048	wavefront sensor 5, right segment, Q signal
H2:ASC-WFS5_Q4	float	2048	wavefront sensor 5, left segment, Q signal
H2:ASC-WFS5_Q1	float	2048	wavefront sensor 5, top segment, Q signal
H2:ASC-WFS5_Q3	float	2048	wavefront sensor 5, bottom segment, Q signal
H2:ASC-WFS1_IY	float	2048	wavefront sensor 1, I phase, yaw
H2:ASC-WFS1_IP	float	2048	wavefront sensor 1, I phase, pitch
H2:ASC-WFS3_QY	float	2048	wavefront sensor 3, Q phase, yaw
H2:ASC-WFS3_QP	float	2048	wavefront sensor 3, Q phase, pitch
H2:ASC-WFS4_QY	float	2048	wavefront sensor 4, Q phase, yaw
H2:ASC-WFS4_QP	float	2048	wavefront sensor 4, Q phase, pitch
H2:ASC-WFS5_IY	float	2048	wavefront sensor 5, I phase, yaw
H2:ASC-WFS5_IP	float	2048	wavefront sensor 5, I phase, pitch
H2:ASC-WFS5_QY	float	2048	wavefront sensor 5, Q phase, yaw
H2:ASC-WFS5_QP	float	2048	wavefront sensor 5, Q phase, pitch
H2:ASC-QPDX_1	float	2048	quadrant monitor, X arm, upper left
H2:ASC-QPDX_2	float	2048	quadrant monitor, X arm, upper right
H2:ASC-QPDX_3	float	2048	quadrant monitor, X arm, lower left
H2:ASC-QPDX_4	float	2048	quadrant monitor, X arm, lower right
H2:ASC-QPDY_1	float	2048	quadrant monitor, Y arm, upper left
H2:ASC-QPDY_2	float	2048	quadrant monitor, Y arm, upper right
H2:ASC-QPDY_3	float	2048	quadrant monitor, Y arm, lower left
H2:ASC-QPDY_4	float	2048	quadrant monitor, Y arm, lower right
H2:ASC-WFS1_QY1_TO	float	2048	wavefront sensor 1, Q phase, yaw, after error signal sum
H2:ASC-WFS1_QP1_TO	float	2048	wavefront sensor 1, Q phase, pitch, after error signal sum
H2:ASC-WFS2_IY1_TO	float	2048	wavefront sensor 2, I phase, yaw, after error signal sum
H2:ASC-WFS2_IP1_TO	float	2048	wavefront sensor 2, I phase, pitch, after error signal sum
H2:ASC-WFS2_QY1_TO	float	2048	wavefront sensor 2, Q phase, yaw, after error signal sum
H2:ASC-WFS2_QP1_TO	float	2048	wavefront sensor 2, Q phase, pitch, after error signal sum
H2:ASC-WFS3_IY1_TO	float	2048	wavefront sensor 3, I phase, yaw, after error signal sum
H2:ASC-WFS3_IP1_TO	float	2048	wavefront sensor 3, I phase, pitch, after error signal sum
H2:ASC-WFS4_IY1_TO	float	2048	wavefront sensor 4, I phase, yaw, after error signal sum
H2:ASC-WFS4_IP1_TO	float	2048	wavefront sensor 4, I phase, pitch, eafter error signal sum
H2:ASC-QPDX_Y1_TO	float	2048	quadrant monitor, X arm, yaw, after error signal sum
H2:ASC-QPDX_P1_TO	float	2048	quadrant monitor, X arm, pitch, after error signal sum
H2:ASC-QPDY_Y1_TO	float	2048	quadrant monitor, Y arm, yaw, after error signal sum
H2:ASC-QPDY_P1_TO	float	2048	quadrant monitor, Y arm, pitch, after error signal sum

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H2:ASC-WFS1_QY2_TO	float	2048	wavefront sensor 1, Q phase, yaw, after control signal sum
H2:ASC-WFS1_QP2_TO	float	2048	wavefront sensor 1, Q phase, pitch, after control signal sum
H2:ASC-WFS2_IY2_TO	float	2048	wavefront sensor 2, I phase, yaw, after control signal sum
H2:ASC-WFS2_IP2_TO	float	2048	wavefront sensor 2, I phase, pitch, after control signal sum
H2:ASC-WFS2_QY2_TO	float	2048	wavefront sensor 2, Q phase, yaw, after control signal sum
H2:ASC-WFS2_QP2_TO	float	2048	wavefront sensor 2, Q phase, pitch, after control signal sum
H2:ASC-WFS3_IY2_TO	float	2048	wavefront sensor 3, I phase, yaw, after control signal sum
H2:ASC-WFS3_IP2_TO	float	2048	wavefront sensor 3, I phase, pitch, after control signal sum
H2:ASC-WFS4_IY2_TO	float	2048	wavefront sensor 4, I phase, yaw, after control signal sum
H2:ASC-WFS4_IP2_TO	float	2048	wavefront sensor 4, I phase, pitch, after control signal sum
H2:ASC-QPDX_Y2_TO	float	2048	quadrant monitor, X arm, yaw, after control signal sum
H2:ASC-QPDX_P2_TO	float	2048	quadrant monitor, X arm, pitch, after control signal sum
H2:ASC-QPDY_Y2_TO	float	2048	quadrant monitor, Y arm, yaw, after control signal sum
H2:ASC-QPDY_P2_TO	float	2048	quadrant monitor, Y arm, pitch, after control signal sum

Available on a patch panel for analog tests
or temporary DAQ channels:

I00 Channels:

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H2:I00-WFS1_DC2	int16	2048	Mode cleaner WFS 1, right segment, DC signal
H2:I00-WFS1_DC4	int16	2048	Mode cleaner WFS 1, left segment, DC signal
H2:I00-WFS1_DC1	int16	2048	Mode cleaner WFS 1, top segment, DC signal
H2:I00-WFS1_DC3	int16	2048	Mode cleaner WFS 1, bottom segment, DC signal
H2:I00-WFS1_I2	int16	2048	Mode cleaner WFS 1, right segment, I signal
H2:I00-WFS1_I4	int16	2048	Mode cleaner WFS 1, left segment, I signal
H2:I00-WFS1_I1	int16	2048	Mode cleaner WFS 1, top segment, I signal
H2:I00-WFS1_I3	int16	2048	Mode cleaner WFS 1, bottom segment, I signal
H2:I00-WFS1_Q2	int16	2048	Mode cleaner WFS 1, right segment, Q signal
H2:I00-WFS1_Q4	int16	2048	Mode cleaner WFS 1, left segment, Q signal
H2:I00-WFS1_Q1	int16	2048	Mode cleaner WFS 1, top segment, Q signal

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H2:I00-WFS1_Q3	int16	2048	Mode cleaner WFS 1, bottom segment, Q signal
H2:I00-WFS2_DC2	int16	2048	Mode cleaner WFS 2, right segment, DC signal
H2:I00-WFS2_DC4	int16	2048	Mode cleaner WFS 2, left segment, DC signal
H2:I00-WFS2_DC1	int16	2048	Mode cleaner WFS 2, top segment, DC signal
H2:I00-WFS2_DC3	int16	2048	Mode cleaner WFS 2, bottom segment, DC signal
H2:I00-WFS2_I2	int16	2048	Mode cleaner WFS 2, right segment, I signal
H2:I00-WFS2_I4	int16	2048	Mode cleaner WFS 2, left segment, I signal
H2:I00-WFS2_I1	int16	2048	Mode cleaner WFS 2, top segment, I signal
H2:I00-WFS2_I3	int16	2048	Mode cleaner WFS 2, bottom segment, I signal
H2:I00-WFS2_Q2	int16	2048	Mode cleaner WFS 2, right segment, Q signal
H2:I00-WFS2_Q4	int16	2048	Mode cleaner WFS 2, left segment, Q signal
H2:I00-WFS2_Q1	int16	2048	Mode cleaner WFS 2, top segment, Q signal
H2:I00-WFS2_Q3	int16	2048	Mode cleaner WFS 2, bottom segment, Q signal
H2:I00-WFS3_DC1	int16	2048	donut WFS 3, top segment, DC signal
H2:I00-WFS3_DC2	int16	2048	donut WFS 3, right segment, DC signal
H2:I00-WFS3_DC3	int16	2048	donut WFS 3, left segment, DC signal
H2:I00-WFS3_DC4	int16	2048	donut WFS 3, center segment, DC signal
H2:I00-WFS3_I1	int16	2048	donut WFS 3, top segment, I signal
H2:I00-WFS3_I2	int16	2048	donut WFS 3, right segment, I signal
H2:I00-WFS3_I3	int16	2048	donut WFS 3, left segment, I signal
H2:I00-WFS3_I4	int16	2048	donut WFS 3, center segment, I signal
H2:I00-WFS3_Q1	int16	2048	donut WFS 3, top segment, Q signal
H2:I00-WFS3_Q2	int16	2048	donut WFS 3, right segment, Q signal
H2:I00-WFS3_Q3	int16	2048	donut WFS 3, left segment, Q signal
H2:I00-WFS3_Q4	int16	2048	donut WFS 3, center segment, Q signal
H2:I00-WFS4_DC1	int16	2048	donut WFS 4, top segment, DC signal
H2:I00-WFS4_DC2	int16	2048	donut WFS 4, right segment, DC signal
H2:I00-WFS4_DC3	int16	2048	donut WFS 4, left segment, DC signal
H2:I00-WFS4_DC4	int16	2048	donut WFS 4, center segment, DC signal
H2:I00-WFS4_I1	int16	2048	donut WFS 4, top segment, I signal
H2:I00-WFS4_I2	int16	2048	donut WFS 4, right segment, I signal
H2:I00-WFS4_I3	int16	2048	donut WFS 4, left segment, I signal
H2:I00-WFS4_I4	int16	2048	donut WFS 4, center segment, I signal
H2:I00-WFS4_Q1	int16	2048	donut WFS 4, top segment, Q signal
H2:I00-WFS4_Q2	int16	2048	donut WFS 4, right segment, Q signal
H2:I00-WFS4_Q3	int16	2048	donut WFS 4, left segment, Q signal

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H2:IOO-WFS4_Q4 int16 2048 donut WFS 4, center segment, Q signal

ASC Channels:
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H2:ASC-WFS1_DC2	int16	16	wavefront sensor 1, right segment, DC signal
H2:ASC-WFS1_DC4	int16	16	wavefront sensor 1, left segment, DC signal
H2:ASC-WFS1_DC1	int16	16	wavefront sensor 1, top segment, DC signal
H2:ASC-WFS1_DC3	int16	16	wavefront sensor 1, bottom segment, DC signal
H2:ASC-WFS2_DC2	int16	16	wavefront sensor 2, right segment, DC signal
H2:ASC-WFS2_DC4	int16	16	wavefront sensor 2, left segment, DC signal
H2:ASC-WFS2_DC1	int16	16	wavefront sensor 2, top segment, DC signal
H2:ASC-WFS2_DC3	int16	16	wavefront sensor 2, bottom segment, DC signal
H2:ASC-WFS3_DC2	int16	2048	wavefront sensor 3, right segment, DC signal
H2:ASC-WFS3_DC4	int16	2048	wavefront sensor 3, left segment, DC signal
H2:ASC-WFS3_DC1	int16	2048	wavefront sensor 3, top segment, DC signal
H2:ASC-WFS3_DC3	int16	2048	wavefront sensor 3, bottom segment, DC signal
H2:ASC-WFS4_DC2	int16	2048	wavefront sensor 4, right segment, DC signal
H2:ASC-WFS4_DC4	int16	2048	wavefront sensor 4, left segment, DC signal
H2:ASC-WFS4_DC1	int16	2048	wavefront sensor 4, top segment, DC signal
H2:ASC-WFS4_DC3	int16	2048	wavefront sensor 4, bottom segment, DC signal
H2:ASC-WFS5_DC2	int16	16	wavefront sensor 5, right segment, DC signal
H2:ASC-WFS5_DC4	int16	16	wavefront sensor 5, left segment, DC signal
H2:ASC-WFS5_DC1	int16	16	wavefront sensor 5, top segment, DC signal
H2:ASC-WFS5_DC3	int16	16	wavefront sensor 5, bottom segment, DC signal

PEM Channels available through EPICS (LVEA)

H0:PEM-LVEA_TEMP1	EPICS	temperature, LVEA 2K, from dust monitor
H0:PEM-LVEA_TEMP2	EPICS	temperature, LVEA 4K
H0:PEM-LVEA_TEMP3	EPICS	temperature, PSL 2K

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H0:PEM-LVEA_TEMP4	EPICS	temperature, PSL 4K
H0:PEM-LVEA_RH1	EPICS	relative humidity, LVEA 2K, from dust monitor
H0:PEM-LVEA_RH2	EPICS	relative humidity, LVEA 4K
H0:PEM-LVEA_RH3	EPICS	relative humidity, PSL 2K
H0:PEM-LVEA_RH4	EPICS	relative humidity, PSL 4K
H0:PEM-LVEA_DST1	EPICS	dust monitor, LVEA 2K
H0:PEM-LVEA_DST2	EPICS	dust monitor, LVEA 4K
H0:PEM-LVEA_DST3	EPICS	dust monitor, PSL 2K
H0:PEM-LVEA_DST4	EPICS	dust monitor, PSL 4K
H0:PEM-LVEA_DST5	EPICS	dust monitor, optics lab
H0:PEM-LVEA_DST6	EPICS	dust monitor, vacuum prep
H0:PEM-LVEA_DST7	EPICS	dust monitor, bake oven
H0:PEM-LVEA_DST8	EPICS	dust monitor, mobile 1
H0:PEM-LVEA_DST9	EPICS	dust monitor, mobile 2
H0:PEM-LVEA_DST10	EPICS	dust monitor, mobile 3
H0:PEM-LVEA_DST11	EPICS	dust monitor, mobile 4
H0:PEM-LVEA_TEMPO1	EPICS	outside temperature, LVEA, north
H0:PEM-LVEA_TEMPO2	EPICS	outside temperature, LVEA, east
H0:PEM-LVEA_TEMPO3	EPICS	outside temperature, LVEA, south
H0:PEM-LVEA_TEMPO4	EPICS	outside temperature, LVEA, west
H0:PEM-LVEA_TEMPO5	EPICS	temperature, weather station, LVEA, outside
H0:PEM-LVEA_TEMP5	EPICS	temperature, weather station, MSR, inside
H0:PEM-LVEA_RHO5	EPICS	relative humidity, weather station, LVEA, outside
H0:PEM-LVEA_RH5	EPICS	relative humidity, weather station, LVEA, inside
H0:PEM-LVEA_BPO5	EPICS	barometric pressure, weather station, LVEA, outside
H0:PEM-LVEA_BP5	EPICS	barometric pressure, weather station, LVEA, inside
H0:PEM-LVEA_RAIN	EPICS	rain fall, weather station, LVEA, outside
H0:PEM-LVEA_WIND	EPICS	wind speed, weather station, LVEA, outside
H0:PEM-LVEA_WDIR	EPICS	wind direction, weather station, LVEA, outside
H0:PEM-BT1_TEMP	EPICS	temperature, beam tube 0
H0:PEM-BT2_TEMP	EPICS	temperature, beam tube 500
H0:PEM-BT3_TEMP	EPICS	temperature, beam tube 1000
H0:PEM-BT1_RH	EPICS	relative humidity, beam tube 0
H0:PEM-BT2_RH	EPICS	relative humidity, beam tube 500
H0:PEM-BT3_RH	EPICS	relative humidity, beam tube 1000

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PEM Channels available at rack 1x5

H0:PEM-PSL1_ACCX	int16	2048	accelerometer, PSL 4K, X direction
H0:PEM-PSL1_ACCY	int16	2048	accelerometer, PSL 4K, Y direction
H0:PEM-PSL1_ACCZ	int16	2048	accelerometer, PSL 4K, Z direction
H0:PEM-HAM1_ACCX	int16	2048	accelerometer, HAM 1, X direction
H0:PEM-HAM1_ACCY	int16	2048	accelerometer, HAM 1, Y direction
H0:PEM-HAM1_ACCZ	int16	2048	accelerometer, HAM 1, Z direction
H0:PEM-HAM2_ACCX	int16	2048	accelerometer, HAM 2, X direction
H0:PEM-HAM2_ACCY	int16	2048	accelerometer, HAM 2, Y direction
H0:PEM-HAM2_ACCZ	int16	2048	accelerometer, HAM 2, Z direction
H0:PEM-HAM3_ACCX	int16	2048	accelerometer, HAM 3, X direction
H0:PEM-HAM3_ACCY	int16	2048	accelerometer, HAM 3, Y direction
H0:PEM-HAM3_ACCZ	int16	2048	accelerometer, HAM 3, Z direction
H0:PEM-HAM4_ACCX	int16	2048	accelerometer, HAM 4, X direction
H0:PEM-HAM4_ACCY	int16	2048	accelerometer, HAM 4, Y direction
H0:PEM-HAM4_ACCZ	int16	2048	accelerometer, HAM 4, Z direction
H0:PEM-BSC2_ACCX	int16	2048	accelerometer, BSC 2, X direction
H0:PEM-BSC2_ACCY	int16	2048	accelerometer, BSC 2, Y direction
H0:PEM-BSC2_ACCZ	int16	2048	accelerometer, BSC 2, Z direction
H0:PEM-BSC3_ACC1X	int16	2048	accelerometer 1, BSC 3, X direction
H0:PEM-BSC3_ACC1Y	int16	2048	accelerometer 1, BSC 3, Y direction
H0:PEM-BSC3_ACC1Z	int16	2048	accelerometer 1, BSC 3, Z direction
H0:PEM-BSC3_ACC2X	int16	2048	accelerometer 2, BSC 3, X direction
H0:PEM-BSC3_ACC2Y	int16	2048	accelerometer 2, BSC 3, Y direction
H0:PEM-BSC3_ACC2Z	int16	2048	accelerometer 2, BSC 3, Z direction
H0:PEM-PSL1_MIC	int16	2048	microphone, PSL 4K
H0:PEM-HAM1_MIC	int16	2048	microphone, HAM 1
H0:PEM-HAM2_MIC	int16	2048	microphone, HAM 2
H0:PEM-HAM3_MIC	int16	2048	microphone, HAM 3
H0:PEM-HAM4_MIC	int16	2048	microphone, HAM 4
H0:PEM-BSC2_MIC	int16	2048	microphone, BSC 2
H0:PEM-LVEA1_NBRF	int16	16384	narrow band rf receiver, 4K
H0:PEM-LVEA_WBRF1	int16	2048	wide band rf receiver, channel 1

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H0:PEM-LVEA_WBRF2	int16	2048	wide band rf receiver, channel 2
H0:PEM-LVEA_WBRF3	int16	2048	wide band rf receiver, channel 3
H0:PEM-LVEA_WBRF4	int16	2048	wide band rf receiver, channel 4
H0:PEM-LVEA_WBRF5	int16	2048	wide band rf receiver, channel 5
H0:PEM-LVEA_WBRF6	int16	2048	wide band rf receiver, channel 6
H0:PEM-LVEA_WBRF7	int16	2048	wide band rf receiver, channel 7
H0:PEM-LVEA_WBRF8	int16	2048	wide band rf receiver, channel 8
H0:PEM-HAM3_MAGX	int16	2048	magnetometer, HAM 3, X direction
H0:PEM-HAM3_MAGY	int16	2048	magnetometer, HAM 3, Y direction
H0:PEM-HAM3_MAGZ	int16	2048	magnetometer, HAM 3, Z direction
H0:PEM-BSC1_MAGX	int16	2048	magnetometer, BSC 1, X direction
H0:PEM-BSC1_MAGY	int16	2048	magnetometer, BSC 1, Y direction
H0:PEM-BSC1_MAGZ	int16	2048	magnetometer, BSC 1, Z direction
H0:PEM-BSC1_MAGX	int16	2048	magnetometer, BSC 2, X direction
H0:PEM-BSC1_MAGY	int16	2048	magnetometer, BSC 2, Y direction
H0:PEM-BSC1_MAGZ	int16	2048	magnetometer, BSC 2, Z direction
H0:PEM-BSC1_MAGX	int16	2048	magnetometer, BSC 3, X direction
H0:PEM-BSC1_MAGY	int16	2048	magnetometer, BSC 3, Y direction
H0:PEM-BSC1_MAGZ	int16	2048	magnetometer, BSC 3, Z direction
H0:PEM-LVEA_MAGX	int16	2048	magnetometer, outside, X direction
H0:PEM-LVEA_MAGY	int16	2048	magnetometer, outside, Y direction
H0:PEM-LVEA_MAGZ	int16	2048	magnetometer, outside, Z direction
H0:PEM-BT1_ACCX	int16	2048	accelerometer, beam tube 0, X direction
H0:PEM-BT1_ACCY	int16	2048	accelerometer, beam tube 0, Y direction
H0:PEM-BT1_ACCZ	int16	2048	accelerometer, beam tube 0, Z direction
H0:PEM-BT2_ACCX	int16	2048	accelerometer, beam tube 500, X direction
H0:PEM-BT2_ACCY	int16	2048	accelerometer, beam tube 500, Y direction
H0:PEM-BT2_ACCZ	int16	2048	accelerometer, beam tube 500, Z direction
H0:PEM-BT3_ACCX	int16	2048	accelerometer, beam tube 1000, X direction
H0:PEM-BT3_ACCY	int16	2048	accelerometer, beam tube 1000, Y direction
H0:PEM-BT3_ACCZ	int16	2048	accelerometer, beam tube 1000, Z direction
H0:PEM-BT1_MIC	int16	2048	microphone, beam tube 0
H0:PEM-BT2_MIC	int16	2048	microphone, beam tube 500
H0:PEM-BT3_MIC	int16	2048	microphone, beam tube 1000

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DAQ channels at mid/end

MID X

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H2:SUS-ETMX_COIL1	int16	2048	suspension coil read-back, ETMX, upper left
H2:SUS-ETMX_COIL2	int16	2048	suspension coil read-back, ETMX, upper right
H2:SUS-ETMX_COIL3	int16	2048	suspension coil read-back, ETMX, lower left
H2:SUS-ETMX_COIL4	int16	2048	suspension coil read-back, ETMX, lower right
H2:SUS-ETMX_COIL5	int16	2048	suspension coil read-back, ETMX, side
H2:SUS-ETMX_COIL6	int16	16384	suspension coil read-back, ETMX, sum
H2:SUS-ETMX_SENS1	int16	256	suspension sensor, ETMX, upper left
H2:SUS-ETMX_SENS2	int16	256	suspension sensor, ETMX, upper right
H2:SUS-ETMX_SENS3	int16	256	suspension sensor, ETMX, lower left
H2:SUS-ETMX_SENS4	int16	256	suspension sensor, ETMX, lower right
H2:SUS-ETMX_SENS5	int16	256	suspension sensor, ETMX, side
H0:PEM-MX_SEISX	int16	256	seismometer, mid X, X direction
H0:PEM-MX_SEISY	int16	256	seismometer, mid X, Y direction
H0:PEM-MX_SEISZ	int16	256	seismometer, mid X, Z direction
H0:PEM-MX_TILTX	int16	256	tiltmeter, mid X, X direction
H0:PEM-MX_TILTY	int16	256	tiltmeter, mid X, Y direction
H0:PEM-MX_TEMP2	int16	16	tiltmeter, mid X, temperature
H0:PEM-BSC5_ACCX	int16	2048	accelerometer, BSC 5, X direction
H0:PEM-BSC5_ACCY	int16	2048	accelerometer, BSC 5, Y direction
H0:PEM-BSC5_ACCZ	int16	2048	accelerometer, BSC 5, Z direction
H0:PEM-BSC5_MIC	int16	2048	microphone, BSC 5
H2:LSC-ETMX_CAL	int16	16384	calibration read-back, ETM X
H2:GDS-GPS_RAMP3	int16	16384	GPS ramp timing signal, ADCU 5
H2:GDS-GPS_TRIG4	int16	16384	GPS trigger signal, ADCU 5
H0:GDS-MX_TO1	int16	16384	temporary test output 1, mid X
H0:GDS-MX_TO2	int16	2048	temporary test output 2, mid X
H0:GDS-MX_TO3	int16	2048	temporary test output 3, mid X
H0:GDS-MX_TO4	int16	2048	temporary test output 4, mid X
H0:GDS-MX_TO5	int16	2048	temporary test output 5, mid X

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MID Y

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H2:SUS-ETMY_COIL1	int16	2048	suspension coil read-back, ETMY, upper left
H2:SUS-ETMY_COIL2	int16	2048	suspension coil read-back, ETMY, upper right
H2:SUS-ETMY_COIL3	int16	2048	suspension coil read-back, ETMY, lower left
H2:SUS-ETMY_COIL4	int16	2048	suspension coil read-back, ETMY, lower right
H2:SUS-ETMY_COIL5	int16	2048	suspension coil read-back, ETMY, side
H2:SUS-ETMY_COIL6	int16	16384	suspension coil read-back, ETMY, sum
H2:SUS-ETMY_SENS1	int16	256	suspension sensor, ETMY, upper left
H2:SUS-ETMY_SENS2	int16	256	suspension sensor, ETMY, upper right
H2:SUS-ETMY_SENS3	int16	256	suspension sensor, ETMY, lower left
H2:SUS-ETMY_SENS4	int16	256	suspension sensor, ETMY, lower right
H2:SUS-ETMY_SENS5	int16	256	suspension sensor, ETMY, side
H0:PEM-MY_SEISX	int16	256	seismometer, mid Y, X direction
H0:PEM-MY_SEISY	int16	256	seismometer, mid Y, Y direction
H0:PEM-MY_SEISZ	int16	256	seismometer, mid Y, Z direction
H0:PEM-MY_TILTX	int16	256	tiltmeter, mid Y, X direction
H0:PEM-MY_TILTY	int16	256	tiltmeter, mid Y, Y direction
H0:PEM-MY_TEMP2	int16	16	tiltmeter, mid Y, temperature
H0:PEM-BSC6_ACCX	int16	2048	accelerometer, BSC 6, X direction
H0:PEM-BSC6_ACCY	int16	2048	accelerometer, BSC 6, Y direction
H0:PEM-BSC6_ACCZ	int16	2048	accelerometer, BSC 6, Z direction
H0:PEM-BSC6_MIC	int16	2048	microphone, BSC 6
H2:LSC-ETMY_CAL	int16	16384	calibration read-back, ETM Y
H0:PEM-BT4_ACCX	int16	2048	accelerometer, beam tube 1500, X direction
H0:PEM-BT4_ACCY	int16	2048	accelerometer, beam tube 1500, Y direction
H0:PEM-BT4_ACCZ	int16	2048	accelerometer, beam tube 1500, Z direction
H0:PEM-BT5_ACCX	int16	2048	accelerometer, beam tube 2000, X direction
H0:PEM-BT5_ACCY	int16	2048	accelerometer, beam tube 2000, Y direction
H0:PEM-BT5_ACCZ	int16	2048	accelerometer, beam tube 2000, Z direction
H0:PEM-BT4_MIC	int16	2048	microphone, beam tube 1500
H0:PEM-BT5_MIC	int16	2048	microphone, beam tube 2000
H2:GDS-GPS_RAMP4	int16	16384	GPS ramp timing signal, ADCU 6
H2:GDS-GPS_TRIG4	int16	16384	GPS trigger signal, ADCU 6

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END X

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H1:SUS-ETMX_COIL1	int16	2048	suspension coil read-back, ETMX, upper left
H1:SUS-ETMX_COIL2	int16	2048	suspension coil read-back, ETMX, upper right
H1:SUS-ETMX_COIL3	int16	2048	suspension coil read-back, ETMX, lower left
H1:SUS-ETMX_COIL4	int16	2048	suspension coil read-back, ETMX, lower right
H1:SUS-ETMX_COIL5	int16	2048	suspension coil read-back, ETMX, side
H1:SUS-ETMX_COIL6	int16	16384	suspension coil read-back, ETMX, sum
H1:SUS-ETMX_SENS1	int16	256	suspension sensor, ETMX, upper left
H1:SUS-ETMX_SENS2	int16	256	suspension sensor, ETMX, upper right
H1:SUS-ETMX_SENS3	int16	256	suspension sensor, ETMX, lower left
H1:SUS-ETMX_SENS4	int16	256	suspension sensor, ETMX, lower right
H1:SUS-ETMX_SENS5	int16	256	suspension sensor, ETMX, side
H0:PEM-EX_SEISX	int16	256	seismometer, end X, X direction
H0:PEM-EX_SEISY	int16	256	seismometer, end X, Y direction
H0:PEM-EX_SEISZ	int16	256	seismometer, end X, Z direction
H0:PEM-EX_TILTX	int16	256	tiltmeter, end X, X direction
H0:PEM-EX_TILTY	int16	256	tiltmeter, end X, Y direction
H0:PEM-EX_TEMP2	int16	16	tiltmeter, end X, temperature
H0:PEM-BSC9_ACC1X	int16	2048	accelerometer 1, BSC 9, X direction
H0:PEM-BSC9_ACC1Y	int16	2048	accelerometer 1, BSC 9, Y direction
H0:PEM-BSC9_ACC1Z	int16	2048	accelerometer 1, BSC 9, Z direction
H0:PEM-BSC9_ACC2X	int16	2048	accelerometer 1, BSC 9, X direction
H0:PEM-BSC9_ACC2Y	int16	2048	accelerometer 1, BSC 9, Y direction
H0:PEM-BSC9_ACC2Z	int16	2048	accelerometer 1, BSC 9, Z direction
H0:PEM-BSC9_MIC	int16	2048	microphone, BSC 9
H0:PEM-BSC9_MAGX	int16	2048	magnetometer, BSC 9, X direction
H0:PEM-BSC9_MAGY	int16	2048	magnetometer, BSC 9, Y direction
H0:PEM-BSC9_MAGZ	int16	2048	magnetometer, BSC 9, Z direction
H1:LSC-ETMY_CAL	int16	16384	calibration read-back, ETM Y
H1:GDS-GPS_RAMP3	int16	16384	GPS ramp timing signal, ADCU 11
H1:GDS-GPS_TRIG3	int16	16384	GPS trigger signal, ADCU 11
H0:GDS-EX_TO1	int16	16384	temporary test output 1, end X
H0:GDS-EX_TO2	int16	2048	temporary test output 2, end X

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END Y

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H1:SUS-ETMY_COIL1	int16	2048	suspension coil read-back, ETMY, upper left
H1:SUS-ETMY_COIL2	int16	2048	suspension coil read-back, ETMY, upper right
H1:SUS-ETMY_COIL3	int16	2048	suspension coil read-back, ETMY, lower left
H1:SUS-ETMY_COIL4	int16	2048	suspension coil read-back, ETMY, lower right
H1:SUS-ETMY_COIL5	int16	2048	suspension coil read-back, ETMY, side
H1:SUS-ETMY_COIL6	int16	16384	suspension coil read-back, ETMY, sum
H1:SUS-ETMY_SENS1	int16	256	suspension sensor, ETMY, upper left
H1:SUS-ETMY_SENS2	int16	256	suspension sensor, ETMY, upper right
H1:SUS-ETMY_SENS3	int16	256	suspension sensor, ETMY, lower left
H1:SUS-ETMY_SENS4	int16	256	suspension sensor, ETMY, lower right
H1:SUS-ETMY_SENS5	int16	256	suspension sensor, ETMY, side
H0:PEM-EY_SEISX	int16	256	seismometer, end Y, X direction
H0:PEM-EY_SEISY	int16	256	seismometer, end Y, Y direction
H0:PEM-EY_SEISZ	int16	256	seismometer, end Y, Z direction
H0:PEM-EY_TILTX	int16	256	tiltmeter, end Y, X direction
H0:PEM-EY_TILTY	int16	256	tiltmeter, end Y, Y direction
H0:PEM-EY_TEMP2	int16	16	tiltmeter, end Y, temperature
H0:PEM-BSC10_ACC1X	int16	2048	accelerometer 1, BSC 10, X direction
H0:PEM-BSC10_ACC1Y	int16	2048	accelerometer 1, BSC 10, Y direction
H0:PEM-BSC10_ACC1Z	int16	2048	accelerometer 1, BSC 10, Z direction
H0:PEM-BSC10_ACC2X	int16	2048	accelerometer 2, BSC 10, X direction
H0:PEM-BSC10_ACC2Y	int16	2048	accelerometer 2, BSC 10, Y direction
H0:PEM-BSC10_ACC2Z	int16	2048	accelerometer 2, BSC 10, Z direction
H0:PEM-BSC10_MIC	int16	2048	microphone, BSC 6
H0:PEM-BSC10_MAGX	int16	2048	magnetometer, BSC 10, X direction
H0:PEM-BSC10_MAGY	int16	2048	magnetometer, BSC 10, Y direction
H0:PEM-BSC10_MAGZ	int16	2048	magnetometer, BSC 10, Z direction
H1:LSC-ETMY_CAL	int16	16384	calibration read-back, ETM Y
H1:GDS-GPS_RAMP4	int16	16384	GPS ramp timing signal, ADCU 12
H1:GDS-GPS_TRIG4	int16	16384	GPS trigger signal, ADCU 12
H0:GDS-EY_TO1	int16	16384	temporary test output 1, end Y
H0:GDS-EY_TO2	int16	2048	temporary test output 2, end Y

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PEM Channels available through EPICS (mid/end)

H0:PEM-MX_DST1	EPICS	dust monitor, mid X
H0:PEM-MX_DST2	EPICS	dust monitor, mid X, optics lab
H0:PEM-MX_DST3	EPICS	dust monitor, mid X, mobile
H0:PEM-MX_TEMPO1	EPICS	outside temperature, mid X, north
H0:PEM-MX_TEMPO2	EPICS	outside temperature, mid X, east
H0:PEM-MX_TEMPO3	EPICS	outside temperature, mid X, south
H0:PEM-MX_TEMPO4	EPICS	outside temperature, mid X, west
H0:PEM-MX_TEMPO5	EPICS	temperature, weather station, mid X, outside
H0:PEM-MX_TEMP1	EPICS	temperature, weather station, mid X, inside
H0:PEM-MX_RHO	EPICS	relative humidity, weather station, mid X, outside
H0:PEM-MX_RH	EPICS	relative humidity, weather station, mid X, inside
H0:PEM-MX_BPO	EPICS	barometric pressure, weather station, mid X, outside
H0:PEM-MX_BP	EPICS	barometric pressure, weather station, mid X, inside
H0:PEM-MX_RAIN	EPICS	rain fall, weather station, mid X, outside
H0:PEM-MX_WIND	EPICS	wind speed, weather station, mid X, outside
H0:PEM-MX_WDIR	EPICS	wind direction, weather station, mid X, outside
H0:PEM-MY_DST1	EPICS	dust monitor, mid Y
H0:PEM-MY_DST2	EPICS	dust monitor, mid Y, optics lab
H0:PEM-MY_DST3	EPICS	dust monitor, mid Y, mobile
H0:PEM-MY_TEMPO1	EPICS	outside temperature, mid Y, north
H0:PEM-MY_TEMPO2	EPICS	outside temperature, mid Y, east
H0:PEM-MY_TEMPO3	EPICS	outside temperature, mid Y, south
H0:PEM-MY_TEMPO4	EPICS	outside temperature, mid Y, west
H0:PEM-MY_TEMPO5	EPICS	temperature, weather station, mid Y, outside
H0:PEM-MY_TEMP1	EPICS	temperature, weather station, mid Y, inside
H0:PEM-MY_RHO	EPICS	relative humidity, weather station, mid Y, outside
H0:PEM-MY_RH	EPICS	relative humidity, weather station, mid Y, inside
H0:PEM-MY_BPO	EPICS	barometric pressure, weather station, mid Y, outside
H0:PEM-MY_BP	EPICS	barometric pressure, weather station, mid Y, inside
H0:PEM-MY_RAIN	EPICS	rain fall, weather station, mid Y, outside

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H0:PEM-MY_WIND	EPICS	wind speed, weather station, mid Y, outside
H0:PEM-MY_WDIR	EPICS	wind direction, weather station, mid Y, outside
H0:PEM-BT4_TEMP	EPICS	temperature, beam tube 1500
H0:PEM-BT5_TEMP	EPICS	temperature, beam tube 2000
H0:PEM-BT4_RH	EPICS	relative humidity, beam tube 1500
H0:PEM-BT5_RH	EPICS	relative humidity, beam tube 2000
H0:PEM-EX_DST1	EPICS	dust monitor, end X
H0:PEM-EX_DST2	EPICS	dust monitor, end X, optics lab
H0:PEM-EX_DST3	EPICS	dust monitor, end X, mobile
H0:PEM-EX_TEMPO1	EPICS	outside temperature, end X, north
H0:PEM-EX_TEMPO2	EPICS	outside temperature, end X, east
H0:PEM-EX_TEMPO3	EPICS	outside temperature, end X, south
H0:PEM-EX_TEMPO4	EPICS	outside temperature, end X, west
H0:PEM-EX_TEMPO5	EPICS	temperature, weather station, end X, outside
H0:PEM-EX_TEMP1	EPICS	temperature, weather station, end X, inside
H0:PEM-EX_RHO	EPICS	relative humidity, weather station, end X, outside
H0:PEM-EX_RH	EPICS	relative humidity, weather station, end X, inside
H0:PEM-EX_BPO	EPICS	barometric pressure, weather station, end X, outside
H0:PEM-EX_BP	EPICS	barometric pressure, weather station, end X, inside
H0:PEM-EX_RAIN	EPICS	rain fall, weather station, end X, outside
H0:PEM-EX_WIND	EPICS	wind speed, weather station, end X, outside
H0:PEM-EX_WDIR	EPICS	wind direction, weather station, end X, outside
H0:PEM-EY_DST1	EPICS	dust monitor, end Y
H0:PEM-EY_DST2	EPICS	dust monitor, end Y, optics lab
H0:PEM-EY_DST3	EPICS	dust monitor, end Y, mobile
H0:PEM-EY_TEMPO1	EPICS	outside temperature, end Y, north
H0:PEM-EY_TEMPO2	EPICS	outside temperature, end Y, east
H0:PEM-EY_TEMPO3	EPICS	outside temperature, end Y, south
H0:PEM-EY_TEMPO4	EPICS	outside temperature, end Y, west
H0:PEM-EY_TEMPO5	EPICS	temperature, weather station, end Y, outside
H0:PEM-EY_TEMP1	EPICS	temperature, weather station, end Y, inside
H0:PEM-EY_RHO	EPICS	relative humidity, weather station, end Y, outside
H0:PEM-EY_RH	EPICS	relative humidity, weather station, end Y, inside
H0:PEM-EY_BPO	EPICS	barometric pressure, weather station, end Y, outside

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H0:PEM-EY_BP	EPICS	barometric pressure, weather station, end Y, inside
H0:PEM-EY_RAIN	EPICS	rain fall, weather station, end Y, outside
H0:PEM-EY_WIND	EPICS	wind speed, weather station, end Y, outside
H0:PEM-EY_WDIR	EPICS	wind direction, weather station, end Y, outside