facility name	TLM_ID	TLM_NAME	UNIT	Description	Example
IPU	J#H0700YC4205	TAXI_NonVideo_X	Mbps	the upper limit of data rate for non-video data (unit: Mega bit per second)	0
IPU	J#H0700YC4209	TAXI_Xmtr_Rate	Mbps	the upper limit of total data rate	43
IPU	J#H0700YC4212	VRU1_Input_Ch	ND	input channel number to VRU1 (not used)	None
IPU	J#H0700YC4213	VRU1_Stat	ND	VRU1 status	Off
IPU	J#H0700YC4216	VRU2_Input_Ch	ND	input channel number to VRU2	J206 Analog
IPU	J#H0700YC4217	VRU2_Stat	ND	VRU2 status	Pause
IPU	J#H0700YC4220	VRU3_Input_Ch	ND	input channel number to VRU3	J207 Analog
IPU	J#H0700YC4221	VRU3_Stat	ND	VRU3 status	Pause
IPU	J#H0700YC4224	VRU4_Input_Ch	ND	input channel number to VRU4	J208 Analog
IPU	J#H0700YC4225	VRU4_Stat	ND	VRU4 status	Pause
IPU	J#H0700YC4228	VRU5_Input_Ch	ND	input channel number to VRU5	J209 Analog
IPU	J#H0700YC4229	VRU5_Stat	ND	VRU5 status	Pause
IPU	J#H0700YC4232	VRU6_Input_Ch	ND	input channel number to VRU6	J210 Analog
IPU	J#H0700YC4233	VRU6_Stat	ND	VRU6 status	Pause
IPU	J#H0700YC4239	VCS1_GOP_Length-	ND	GOP length used by VCS1 in MPEG2 compression	16
IPU	J#H0700YC4240	VCS1_FrameIPDist	ND	IP distance used by VCS1 in MPEG2 compression	
IPU	J#H0700YC4241	VCS1_Rate	Mbps	Video data rate used by VCS1 in MPEG2 compression	0
IPU	J#H0700YC4244	VCS1_Exp_ID	ND	Experiment ID used by VCS1	
IPU	J#H0700YC4250	VCS2_GOP_Length-	ND	GOP length used by VCS2 in MPEG2 compression	16
IPU	J#H0700YC4251	VCS2_FrameIPDist	ND	IP distance used by VCS2 in MPEG2 compression	
IPU	J#H0700YC4252	VCS2_Rate	Mbps	Video data rate used by VCS2 in MPEG2 compression	7.5
IPU	J#H0700YC4255	VCS2_Exp_ID	ND	Experiment ID used by VCS2	
IPU	J#H0700YC4261	VCS3_GOP_Length-	ND	GOP length used by VCS3 in MPEG2 compression	16
IPU	J#H0700YC4262	VCS3_FrameIPDist	ND	IP distance used by VCS3 in MPEG2 compression	
IPU	J#H0700YC4263	VCS3_Rate	Mbps	Video data rate used by VCS3 in MPEG2 compression	0
IPU	J#H0700YC4266	VCS3_Exp_ID	ND	Experiment ID used by VCS3	
IPU	J#H0700YC4272	VCS4_GOP_Length-	ND	GOP length used by VCS4 in MPEG2 compression	16
IPU	J#H0700YC4273	VCS4_FrameIPDist	ND	IP distance used by VCS4 in MPEG2 compression	
IPU	J#H0700YC4274	VCS4_Rate	Mbps	Video data rate used by VCS4 in MPEG2 compression	0
IPU	J#H0700YC4277	VCS4_Exp_ID	ND	Experiment ID used by VCS4	
IPU	J#H0700YC4283	VCS5_GOP_Length-	ND	GOP length used by VCS5 in MPEG2 compression	16
IPU	J#H0700YC4284	VCS5_FrameIPDist	ND	IP distance used by VCS5 in MPEG2 compression	
IPU	J#H0700YC4285	VCS5_Rate	Mbps	Video data rate used by VCS5 in MPEG2 compression	7.5
IPU	J#H0700YC4288	VCS5_Exp_ID	ND	Experiment ID used by VCS5	
IPU	J#H0700YC4294	VCS6_GOP_Length-	ND	GOP length used by VCS6 in MPEG2 compression	16
IPU	J#H0700YC4295	VCS6_FrameIPDist	ND	IP distance used by VCS6 in MPEG2 compression	
IPU	J#H0700YC4296	VCS6_Rate	Mbps	Video data rate used by VCS6 in MPEG2 compression	5
IPU	J#H0700YC4299	VCS6_Exp_ID	ND	Experiment ID used by VCS6	
IPU	J#H0700YC4634	VCS1_Enabled	ND	VCS1 status	Off
IPU	J#H0700YC4635	VCS1_Frame_Size	ND	video frame size at MPEG encoding, CCIR601:720x480[pixel], SIF:352x240[pixel]	SIF
IPU	J#H0700YC4640	VCS1_Input_Ch	ND	input channel number to VCS1	None
IPU	J#H0700YC4645	VCS2_Enabled	ND	VCS2 status	Enabled
IPU	J#H0700YC4646	VCS2_Frame_Size	ND	video frame size at MPEG encoding, CCIR601:720x480[pixel], SIF:352x240[pixel]	CCIR601
IPU	J#H0700YC4651	VCS2_Input_Ch	ND	input channel number to VCS2	J206 Analog
IPU	J#H0700YC4656	VCS3_Enabled	ND	VCS3 status	Off
IPU	J#H0700YC4657	VCS3_Frame_Size	ND	video frame size at MPEG encoding, CCIR601:720x480[pixel], SIF:352x240[pixel]	CCIR601
IPU	J#H0700YC4662	VCS3_Input_Ch	ND	input channel number to VCS3	J207 Analog
IPU	J#H0700YC4667	VCS4_Enabled	ND	VCS4 status	Off
IPU	J#H0700YC4668	VCS4_Frame_Size	ND	video frame size at MPEG encoding, CCIR601:720x480[pixel], SIF:352x240[pixel]	CCIR601
IPU	J#H0700YC4673	VCS4_Input_Ch	ND	input channel number to VCS4	J208 Analog
IPU	J#H0700YC4678	VCS5_Enabled	ND	VCS5 status	Enabled
IPU	J#H0700YC4679	VCS5_Frame_Size	ND	video frame size at MPEG encoding, CCIR601:720x480[pixel], SIF:352x240[pixel]	CCIR601
IPU	J#H0700YC4684	VCS5_Input_Ch	ND	input channel number to VCS5	J209 Analog

facility name	TLM_ID	TLM_NAME	UNIT	Description	Example
IPU	J#H0700YC4689	VCS6_Enabled	ND	VCS6 status	Enabled
IPU	J#H0700YC4690	VCS6_Frame_Size	ND	video frame size at MPEG encoding, CCIR601:720x480[pixel], SIF:352x240[pixel]	CCIR601
IPU	J#H0700YC4695	VCS6_Input_Ch	ND	input channel number to VCS6	J210 Analog
IPU	VRU1_Rec_Time1	VRU1_Rec_Time1	ND	recording time: Year Month Day	0
IPU	VRU1_Rec_Time2	VRU1_Rec_Time2	ND	recording time: hour(24h) minute second (HHMMSS)	0
IPU	VRU1_Tape_Remain	VRU1_Tape_Remain	ND	Remaining time for recording to VRU 1	9999
IPU	VRU2_Rec_Time1	VRU2_Rec_Time1	ND	recording time: Year Month Day	20080902
IPU	VRU2_Rec_Time2	VRU2_Rec_Time2	ND	recording time: hour(24h) minute second (HHMMSS)	14345 (means 01:43:45)
IPU	VRU2_Tape_Remain	VRU2_Tape_Remain	ND	Remaining time for recording to VRU 2	248
IPU	VRU3_Rec_Time1	VRU3_Rec_Time1	ND	recording time: Year Month Day	20080902
IPU	VRU3_Rec_Time2	VRU3_Rec_Time2	ND	recording time: hour(24h) minute second (HHMMSS)	14336
IPU	VRU3_Tape_Remain	VRU3_Tape_Remain	ND	Remaining time for recording to VRU 3 (HHMM)	249 (means 2hours49min.)
IPU	VRU4_Rec_Time1	VRU4_Rec_Time1	ND	recording time: Year Month Day	20080902
IPU	VRU4_Rec_Time2	VRU4_Rec_Time2	ND	recording time: hour(24h) minute second (HHMMSS)	14340
IPU	VRU4_Tape_Remain	VRU4_Tape_Remain	ND	Remaining time for recording to VRU 4	249
IPU	VRU5_Rec_Time1	VRU5_Rec_Time1	ND	recording time: Year Month Day	20080902
IPU	VRU5_Rec_Time2	VRU5_Rec_Time2	ND	recording time: hour(24h) minute second (HHMMSS)	14339
IPU	VRU5_Tape_Remain	VRU5_Tape_Remain	ND	Remaining time for recording to VRU 5	250
IPU	VRU6_Rec_Time1	VRU6_Rec_Time1	ND	recording time: Year Month Day	20080902
IPU	VRU6_Rec_Time2	VRU6_Rec_Time2	ND	recording time: hour(24h) minute second (HHMMSS)	14331
IPU	VRU6_Tape_Remain	VRU6_Tape_Remain	ND	Remaining time for recording to VRU 6	250
FPEF	J#P0600J03100	Obs Win 2 Temp	deg C	temperature of observation window 2(IR view)	21.651045
FPEF	J#P0600J03110	Obs Win 4 Temp	deg C	temperature of observation window 4(half mirror in EC)	21.467934
FPEF	J#P0600J03120	H-D ITO1 Temp	deg C	Heating disk temperature, ITO sensor 1	34.622628
FPEF	J#P0600J03130	H-D ITO2 Temp	deg C	Heating disk temperature, ITO sensor 2	34.974201
FPEF	J#P0600J03140	C-D Amp Temp	deg C	relative temperature amplified "C-D Temp 1", the range is from 0[K] to 5[K]	2.81763
FPEF	J#P0600J03150	S-Lim (Amp2) V	V	voltage of the Amp2 Software Limiter line	0.024171
FPEF	J#P0600J03160	PertierHsidTemp2	deg C	temperature of the peltier heating side sensor 2	34.739819
FPEF	J#P0600J03170	H-Lim2 (Amp2) V	V	voltage of the Amp2 Hardware Limiter line	0.021973
FPEF	J#P0600J03180	Amp 1 Voltage	V	Amp 1 Voltage	9.736896
FPEF	J#P0600J03190	Amp 1 Current	A	Amp 1 Current	0.20957
FPEF	J#P0600J03200	Amp 2 Voltage	V	Amp 2 Voltage	-0.006867
FPEF	J#P0600J03210	Amp 2 Current	A	Amp 2 Current	-1.861995
FPEF	J#P0600J03220	Amp 3 Voltage	V	Amp 3 Voltage	-0.025178
FPEF	J#P0600J03230	Amp 3 Current	A	Amp 3 Current	-0.943386
FPEF	J#P0600J03240	Amp 4 Voltage	V	Amp 4 Voltage	0.112155
FPEF	J#P0600J03250	Amp 4 Current	A	Amp 4 Current	-0.888483
FPEF	J#P0600J03260	C-D Temp 1	deg C	cooling disk temperature, thermocouple-1	29.283111
FPEF	J#P0600J03270	C-D Temp 2	deg C	cooling disk temperature, thermocouple-2	21.101712
FPEF	J#P0600J03280	ObsWin 3 Temp	deg C	temperature of observation window 3(photocro view)	22.258973
FPEF	J#P0600J03290	ObsWin 1 Temp	deg C	temperature of observation window 1(2D	22.36884
FPEF	J#P0600J03300	Pertier Temp 1	deg C	temperature of the peltier heating side, sensor 1	17.695847
FPEF	J#P0600J03310	C-D Temp 3	deg C	cooling disk temperature, thermocouple-3	20.794085
FPEF	J#P0600J03320	TC Comp Temp	deg C	temperature of TC cold junction	22.112484
FPEF	J#P0600J04030	ECInsideGasTemp	deg C	temperature of gas in Experiment Cell	22.427435
FPEF	J#P0600J04040	H-D Pt 1 Temp	deg C	heating disk temperature, platinum sensor 1	36.966449
FPEF	J#P0600J04050	H-D Pt 2 Temp	deg C	heating disk temperature, platinum sensor 2	37.076315
FPEF	J#P0600J04060	H-D Pt 3 Temp	deg C	heating disk temperature, platinum sensor 3	37.449862
FPEF	J#P0600J04078	H-Lim2(Amp4) St	ND	status of Amp 4 hardware limitter-2	OFF
FPEF	J#P0600J04079	H-Lim2(Amp3) St	ND	status of Amp 3 hardware limitter-2	OFF
FPEF	J#P0600J0407A	H-Lim1(Amp4) St	ND	status of Amp 4 hardware limitter-1	OFF
FPEF	J#P0600J0407B	H-Lim1(Amp3) St	ND	status of Amp 3 hardware limitter-1	OFF
FPEF	J#P0600J04087	TC AxCW LS9 St	ND	Not used (used only with MI50 Experiment	OFF
FPEF	J#P0600J04088	TC AxCCW LS8 St	ND	Not used (used only with MI50 Experiment	OFF
FPEF	J#P0600J04089	OptSys CCW LS8St	ND	limit switch status of surface velocity measurement system position, cooling disk	OFF
FPEF	J#P0600J0408A	OptSysIntPosnLS7	ND	limit switch status of surface velocity measurement system position, heating disk	OFF
FPEF	J#P0600J0408B	TC RadCWLS6St(NA	ND	Not used	OFF
FPEF	J#P0600J0408C	L-BShapeCCWLS5St	ND	status of the limit switch-5 for LB shape adjuster	OFF
FPEF	J#P0600J0408D	L-BShapeCW LS4 St	ND	status of the limit switch-4 for LB shape adjuster	OFF

facility name	TLM_ID	TLM_NAME	UNIT	Description	Example
FPEF	J#P0600J0408E	PhotoSnsr3(CW)	ND	limit switch status of cooling disk position, cooling disk side	OFF
FPEF	J#P0600J0408F	PhotoSnsr1(IntP	ND	sensor status of cooling disk initial position	OFF
FPEF	J#P0600J04090	PhotoSnsr2(CCW)	ND	limit switch status of cooling disk position, heating disk side	OFF
FPEF	J#P0600J0409F	AuxLight	ND	status of Aux light ON/OFF	OFF
FPEF	J#P0600J04100	Amp 1 V(Setting)	V	voltage setting value of power amp 1	9.686238
FPEF	J#P0600J04110	Amp 2 V(Setting)	V	voltage setting value of power amp 2	0
FPEF	J#P0600J04120	Amp 3 V(Setting)	V	voltage setting value of power amp 3	0
FPEF	J#P0600J04130	Amp 4 V(Setting)	V	voltage setting value of power amp 4	0
FPEF	J#P0600J04140	Amp 1 C(Setting)	A	current setting value of power amp 1	1.00235
FPEF	J#P0600J04150	Amp 2 C(Setting)	A	current setting value of power amp 2	5.003909
FPEF	J#P0600J04160	Amp 3 C(Setting)	A	current setting value of power amp 3	1.00235
FPEF	J#P0600J04170	Amp 4 C(Setting)	A	current setting value of power amp 4	1.990582
FPEF	J#P0600J04188	GN2 Laser	ND	Gas Nitrogen ($GasN_2$) Laser status	OFF
FPEF	J#P0600J0419F	AuxLight(setting	ND	command status of Aux Light	OFF
FPEF	J#P0600J04200	C-D Posn	mm	distance between Cooling disk and heating	12.439341
FPEF	J#P0600J04210	L-B ShapeAdjQty	cc (=cm^3 =1000mm^3)	quantity for LB shape adjustment (LB shape adjuster)	-0.718635
FPEF	J#P0600J04220	OptSys Cntl Posn	mm	position of surface velocity measurement system	-99.999969
FPEF	J#P0600J04230	TC Ax Posn(N/A)	mm	Not used (used only with MI50 Experiment	0
FPEF	J#P0600J04244	TCAxIntPosnSt(NA	ND	Not used (used only with MI50 Experiment	Initializing
FPEF	J#P0600J04246	TC Ax Move St(NA	ND	Not used (used only with MI50 Experiment	Stopped
FPEF	J#P0600J04247	OptSysIntPosn St	ND	the initialization status about the position of surface measurement system	Not Initialized
FPEF	J#P0600J04249	OptSys Moving St	ND	operating status of the surface measurement system	Stopped
FPEF	J#P0600J0424A	L-BAdjIntPosn(NA	ND	not used	
FPEF	J#P0600J0424C	L-B Shape Adj St	ND	operating status of LB shape adjuster	Stopped
FPEF	J#P0600J0424D	C-D Posn Init St	ND	the initialization status about the position of cooling disk	Initialized
FPEF	J#P0600J0424F	C-D Moving Statu	ND	Cooling Disk Moving status	Stopped
FPEF	J#P0600J04257	Liq Bridge Dia	ND	Liquid Bridge Diameter	30mm
FPEF	J#P0600J04258	ObsWin2&4Cntl ch	ND	sensor channel for temperature control of observation window 2&4	Default
FPEF	J#P0600J0425A	ObsWin1&3Cntl ch	ND	sensor channel for temperature control of observation windows 1&3	Default
FPEF	J#P0600J0425C	H-D Cntl ch	ND	sensor channel for temperature control of heating disk	Default
FPEF	J#P0600J0425D	C-D Cntl ch	ND	sensor channel for temperature control of cooling disk	Default
FPEF	J#P0600J04260	Exp Seq Status	ND	status of the experiment sequence	On Operation
FPEF	J#P0600J04264	ObsWin2&4Hold St	ND	the operating status of temperature control for observation window 2&4	On Operation
FPEF	J#P0600J04265	ObsWin1&3Hold St	ND	the operating status of temperature control for observation window 1&3	On Operation
FPEF	J#P0600J04266	H-D Hold Status	ND	the operating status of heating disk temperature control	Pause
FPEF	J#P0600J04267	C-D Hold Status	ND	the operating status of cooling disk temperature control	On Operation
FPEF	J#P0600J04268	ObsWin2&4Prof St	ND	the editing status of temperature profile for observation window 2&4	Not Edited
FPEF	J#P0600J0426A	ObsWin1&3Prof St	ND	the editing status of temperature profile for observation window 1&3	Not Edited
FPEF	J#P0600J0426C	H-D Temp Prof St	ND	the editing status of heating disk temperature profile	Not Edited
FPEF	J#P0600J0426E	C-D Temp Prof St	ND	the editing status of cooling disk temperature profile	Not Edited
FPEF	J#P0600J04280	GN2PulseSetCount	ND	the number to set frequency of GN2 Laser oscillation "frequency[Hz]=29.97/GN2PulseSetCount"	
FPEF	J#P0600J04290	GN2 Pulse Num	pulse	number of GN2 Laser oscillation	
FPEF	J#P0600J04300	IR Temp Get St	ND	status of measuring temperature via IR	Getting
FPEF	J#P0600J04310	IR Meas Point X1	ND	measuring point in IR image, X-coordinate	225
FPEF	J#P0600J04320	IR Meas Point Y1	ND	measuring point in IR image, Y-coordinate	95
FPEF	J#P0600J24030	Ar Gas Press	kPa	Argon Gas pressure in EC	97.561541
FPEF	J#P0600J24040	Coolant diffP(NA	ND	differential pressure of coolant(not used)	
FPEF	J#P0600J24050	+5V Voltage	V	voltage of "+5V" line	4.905177
FPEF	J#P0600J24060	+15V Voltage	V	voltage of "+15V" line	14.901573
FPEF	J#P0600J24070	-15V Voltage	V	voltage of "-15V" line	-15.051724
FPEF	J#P0600J24080	Exp Cell +15V V	V	voltage of "+15V" line in EC	14.933923
FPEF	J#P0600J24090	Exp Cell -15V V	V	voltage of "-15V" line in EC	-14.974818
FPEF	J#P0600J24100	+5V Reg Voltage	V	voltage of "+5V" regulation line	5.015593
FPEF	J#P0600J24110	CoolingWaterTemp	deg C	temperature of cooling water	21.97332
FPEF	J#P0600J24120	IR Camera Temp	deg C	temperature inside IR camera	25.518349

facility name	TLM_ID	TLM_NAME	UNIT	Description	Example
FPEF	J#P0600J24130	CE Pwr Sply Temp	deg C	temperature at power supply part of the FPEF control Equipment	26.902668
FPEF	J#P0600J24140	CE AmpTemp	deg C	temperature at FPEF Amp part	21.929373
FPEF	J#P0600J24150	A/D Ref Voltage1	V	reference voltage1 to convert analog-digital	10.047301
FPEF	J#P0600J24160	A/D Ref Voltage2	V	reference voltage2 to convert analog-digital	2.495498
FPEF	J#P0600J24170	A/D Ref Voltage3	V	reference voltage3 to convert analog-digital	2.492751
FPEF	J#P0600J24180	A/D Ref Voltage4	V	reference voltage4 to convert analog-digital	2.492751
FPEF	J#P0600J24190	Analog Gr Level	mV	analog ground level for user TC	0
FPEF	J#P0600J24208	FCover/StrobeLim	ND	Front cover switch signal, and thermostat signal at strobe lamp house	OFF
FPEF	J#P0600J2420A	Strobe S-Lim	ND	thermostat signal at strobe lamp house	OFF
FPEF	J#P0600J2420B	IHI/MEC S/W St	ND	Application S/W status	Application S/W
FPEF	J#P0600J2420C	3D Backward Lim2	ND	limit switch 2 status of the 3D CCD camera moving system, backward side	OFF
FPEF	J#P0600J2420D	3D Forward Lim 2	ND	limit switch 2 status of the 3D CCD camera moving system, forward side	OFF
FPEF	J#P0600J2420E	3D Backward Lim1	ND	limit switch 1 status of the 3D CCD camera moving system, backward side	OFF
FPEF	J#P0600J2420F	3D Forward Lim 1	ND	limit switch 1 status of the 3D CCD camera moving system, forward side	OFF
FPEF	J#P0600J2421C	3D Cntl END St	ND	operating status of 3D CCD camera control	END
FPEF	J#P0600J2421D	VSW Cntl End St	ND	operating status of video switcher control	END
FPEF	J#P0600J2421E	Gas Vent Vlv	ND	status of Gas vent valve	Closed
FPEF	J#P0600J2421F	Gas Supply Vlv	ND	status of Gas supply valve	Closed
FPEF	J#P0600J24220	Strobe cntl V	V	voltage of strobe control	6.011758
FPEF	J#P0600J24235	Amp4 Cntl CmdSt	ND	command status for Amp.4 ON/OFF	OFF
FPEF	J#P0600J24236	Amp3 Cntl CmdSt	ND	command status for Amp.3 ON/OFF	OFF
FPEF	J#P0600J24237	Amp2 Cntl CmdSt	ND	command status for Amp.2 ON/OFF	OFF
FPEF	J#P0600J24238	Amp1 Cntl CmdSt	ND	command status for Amp.1 ON/OFF	ON
FPEF	J#P0600J24239	DC12V2 Pwr CmdSt	ND	command status for DC12V-2 power	ON
FPEF	J#P0600J2423A	DC12V1 Pwr CmdSt	ND	command status for DC12V-1 power	ON
FPEF	J#P0600J2423B	DC24V3 Pwr CmdSt	ND	command status for DC24V-3 power	ON
FPEF	J#P0600J2423C	DC24V2 Pwr CmdSt	ND	command status for DC24V-2 power	ON
FPEF	J#P0600J2423D	+/-15V Pwr CmdSt	ND	command status for +/-15V power ON/OFF	ON
FPEF	J#P0600J2423E	DC12V3 Pwr CmdSt	ND	command status for DC12V-3 power	OFF
FPEF	J#P0600J2423F	DC24V1 Pwr CmdSt	ND	command status for DC24V-1 power	OFF
FPEF	J#P0600J2424C	24VAuxLightCmdSt	ND	command status for Aux light power ON/OFF	ON
FPEF	J#P0600J2424D	+24VFPEFVlvCmdSt	ND	command status for FPEF valve power	ON
FPEF	J#P0600J2424E	+-15VGenPw2CmdSt	ND	ON/OFF status of "+/-15V general power-2"for Signal Conditioner Box	ON
FPEF	J#P0600J2424F	+-15VGenPw1CmdSt	ND	ON/OFF status of "+/-15V general power-1"for Signal Conditioner Box	ON
FPEF	J#P0600J2425D	+24V PwrSysCmdSt	ND	ON/OFF status of 24V power system	ON
FPEF	J#P0600J2425E	PwrAmp Sys CmdSt	ND	ON/OFF status of power Amp. system	ON
FPEF	J#P0600J2425F	+12V PwrSysCmdSt	ND	ON/OFF status of +12V power system	ON
FPEF	J#P0600J2426E	GasVentVlv CmdSt	ND	Gas vent valve status	Closed
FPEF	J#P0600J2426F	GasSplyVlv CmdSt	ND	Gas supply valve status	Closed
FPEF	J#P0600J24270	IR Comm Mode	ND	communication mode with IR camera	Sending
FPEF	J#P0600J24280	IR Comm Status	ND	communication status with IR camera	Init OK
FPEF	J#P0600J24288	IR CommErr Statu	ND	error status of communication with IR camera	Normal
FPEF	J#P0600J24290	IR (X1, Y1)Temp	deg C	temperature designated point in IR image, Refer to J#P0600J04310 and J#P0600J04320 for the (X1,Y1) coordinates	27.5
FPEF	J#P0600J24300	IR(X1+1,Y1)Temp	deg C	temperature designated point in IR image, Refer to J#P0600J04310 and J#P0600J04320 for the (X1,Y1) coordinates	27.9
FPEF	J#P0600J24310	IR(X1,Y1+1)Temp	deg C	temperature designated point in IR image, Refer to J#P0600J04310 and J#P0600J04320 for the (X1,Y1) coordinates	27.9
FPEF	J#P0600J24320	IR(X1+1,Y1+1)Tem	deg C	temperature designated point in IR image, Refer to J#P0600J04310 and J#P0600J04320 for the (X1,Y1) coordinates	27.6
FPEF	J#P0600J25030	3D Gain (settig)	ND	3D-camera Gain	8dB
FPEF	J#P0600J25038	3DShutterSpd(set	ND	3D-camera shutter speed	1/60
FPEF	J#P0600J25040	2D Gain(setting)	dB	side view camera Gain	
FPEF	J#P0600J25050	2DShutterSpd(set	ND	side view camera shutter speed	1/60
FPEF	J#P0600J25060	OptCam Gain(sett	dB	camera Gain for Surface Flow Velocity Measurement	
FPEF	J#P0600J25070	OptCamShutterSpd	ND	camera shutter speed for Surface Flow Velocity Measurement	1/60
FPEF	J#P0600J25080	VSW Ch1 InCh(set	ND	Input channel name to Ch1	3DCh1
FPEF	J#P0600J25083	VSW Ch2 InCh(set	ND	Input channel name to Ch2	3DCh2
FPEF	J#P0600J25086	VSW Ch3 InCh(set	ND	Input channel name to Ch3	3DCh3
FPEF	J#P0600J25089	VSW Ch4 InCh(set	ND	Input channel name to Ch4	2D
FPEF	J#P0600J2508C	VSW Ch5 InCh(set	ND	Input channel name to Ch5	IR
FPEF	J#P0600J25090	3D Cam Posn	mm	3D-camera position	-99.999969
FPEF	J#P0600J2509C	Surface/InsideSW	ND	software identification	Surface

facility name	TLM_ID	TLM_NAME	UNIT	Description	Example
FPEF	J#P0600J2510D	3D Posn Init St	ND	Status about 3D-camera position is initialized or not	Not Initialized
FPEF	J#P0600J2510F	3D Moving Status	ND	operating status of 3D-camera moving	Stopped
FPEF	J#P0600J25110	H-D Temp Timer	sec	time of heating disk temperature profile	7006.2
FPEF	J#P0600J25130	C-D Temp Timer	sec	time of cooling disk temperature profile	0
FPEF	J#P0600J25150	H-D HoldLastTime	sec	most recent time point on heating disk temperature profile	6837
FPEF	J#P0600J25170	H-D HoldLastTemp	deg C	most recent temperature point on heating disk temperature profile	37.003071
FPEF	J#P0600J25180	H-D HoldNextTime	sec	next time point on heating disk temperature profile	8037
FPEF	J#P0600J25200	H-D HoldNextTemp	deg C	next temperature point on heating disk temperature profile	37.003071
FPEF	J#P0600J25210	H-DHold N2 Time	sec	2 beyond time point on heating disk temperature profile	8107
FPEF	J#P0600J25230	H-DHold N2 Temp	deg C	2 beyond temperature point on heating disk temperature profile	39.998767
FPEF	J#P0600J25240	C-D HoldLastTime	sec	most recent time point on cooling disk temperature profile	0
FPEF	J#P0600J25260	C-D HoldLastTemp	deg C	most recent temperature point on cooling disk temperature profile	20.003046
FPEF	J#P0600J25270	C-D HoldNextTime	sec	next time point on cooling disk temperature profile	167
FPEF	J#P0600J25290	C-D HoldNextTemp	deg C	next temperature point on cooling disk temperature profile	9.997861
FPEF	J#P0600J25300	C-DHold N2 Time	sec	2 beyond time point on cooling disk temperature profile	12567
FPEF	J#P0600J25320	C-DHold N2 Temp	deg C	2 beyond temperature point on cooling disk temperature profile	9.997861
FPEF	IR_Temp_Avg	IR Temp Avg	deg C	average temperature of 4 points in IR image	27.725
FPEF	Ma10_ITOAvgCD3	Ma10(ITOAvgCD3)	ND	Marangoni number (10cSt silicone oil) calculated by averaged ITO data and CD3	13471.52161
FPEF	Ma10_ITOAvgCDAvg	Ma10(ITOAvgCDAvg)	ND	Marangoni number (10cSt silicone oil) calculated by averaged ITO data and averaged TC data on CD	10958.50176
FPEF	Ma5_ITOAvgCD3	Ma5(ITOAvgCD3)	ND	Marangoni number (5cSt silicone oil) calculated by averaged ITO data and CD3	36360.94518
FPEF	Ma5_ITOAvgCDAvg	Ma5(ITOAvgCDAvg)	ND	Marangoni number (5cSt silicone oil) calculated by averaged ITO data and averaged TC data on CD	29577.15703
FPEF	T_CD3-ECin	T(CD3-ECin)	deg C	temperature: ="CD3"-"gas temp. inside EC"	-1.63335
FPEF	T_ECin-CD1	T(ECin-CD1)	deg C	temperature: ="gas temp. inside EC"-"CD1"	-6.855676
FPEF	T_ECin-CD2	T(ECin-CD2)	deg C	temperature: ="gas temp. inside EC"-"CD2"	1.325724
FPEF	T_ECin-CD3	T(ECin-CD3)	deg C	temperature: ="gas temp. inside EC"-"CD3"	1.63335
FPEF	T_ITO1-ECin	T(ITO1-ECin)	deg C	temperature: ="ITO1"-"gas temp. inside EC"	12.195193
FPEF	T_ITO2-ECin	T(ITO2-ECin)	deg C	temperature: ="ITO2"-"gas temp. inside EC"	12.546766
FPEF	T_ITOAvg-ECin	T(ITOAvg-ECin)	deg C	temperature: ="averaged ITO1,ITO2"-"gas temp. inside	12.370979
FPEF	T_ITOCD3Avg-ECin	T(ITOCD3Avg-ECin)	deg C	temperature: ="averaged ITO1, ITO2 and CD3"-"gas temp. inside EC"	5.368815
FPEF	T_ITOCDAvg-ECin	T(ITOCDAvg-ECin)	deg C	temperature: ="averaged ITO1,ITO2,CD1,CD2,CD3"-"gas temp. inside EC"	6.834923
FPEF	T_Water-CD1	T(Water-CD1)	deg C	temperature: ="cooling water"-"CD1"	-7.309791
FPEF	T_Water-CD2	T(Water-CD2)	deg C	temperature: ="cooling water"-"CD2"	0.871608
FPEF	T_Water-CD3	T(Water-CD3)	deg C	temperature: ="cooling water"-"CD3"	1.179235
FPEF	dT_ITO1-CD1	dT(ITO1-CD1)	deg C	temperature difference between ITO1 and	5.339517
FPEF	dT_ITO1-CD2	dT(ITO1-CD2)	deg C	temperature difference between ITO1 and	13.520916
FPEF	dT_ITO1-CD3	dT(ITO1-CD3)	deg C	temperature difference between ITO1 and	13.828543
FPEF	dT_ITO2-CD1	dT(ITO2-CD1)	deg C	temperature difference between ITO2 and	5.69109
FPEF	dT_ITO2-CD2	dT(ITO2-CD2)	deg C	temperature difference between ITO2 and	13.872489
FPEF	dT_ITO2-CD3	dT(ITO2-CD3)	deg C	temperature difference between ITO2 and	14.180116
FPEF	dT_ITOAvg-CD1	dT(ITOAvg-CD1)	deg C	temperature difference between the average of ITO sensors and CD1	5.515303
FPEF	dT_ITOAvg-CD2	dT(ITOAvg-CD2)	deg C	temperature difference between the average of ITO sensors and CD2	13.696703

Telemetry description for MEIS 1 and 2

facility name	TLM_ID	TLM_NAME	UNIT	Description	Example
FPEF	dT_ITOAvg-CD3	dT(ITOAvg-CD3)	deg C	temperature difference between the average of ITO sensors and CD3	14.004329
FPEF	dT_ITOAvg-CDAvg	dT(ITOAvg-CDAvg)	deg C	temperature difference between the average of ITO sensors and the average of TCs in CD	11.072112

ACRONYM for MEIS 1 and 2 Telemetry

Acronym	Meaning	Description
2D	2 Dimension	–
3D	3 Dimension	–
3D-camera	3D flow field observation camera system	–
ADC	video Analog to Digital Converters	–
BIT	Built-In Test	–
CCIR	Comité Consultatif Internationale des Radiocommunications	related standard (old neme): CCIR601 related standard (new name): ITU-R BT.601
C-D	Cooling Disk	the cooling side of the liquid bridge
CD	Cooling Disk	the cooling side of the liquid bridge
CE	Control Equipment	FPEF Control Equipment
CW	ClockWise	It means moving direction of various mechanism
CCW	CounterClockWise	It means the counter direction of CW
DME	Dual MPEG Encoder	MPEG Enocder board. there are 2 encoders on a board.
EC	Experiment Cell	Unique subsystem for experiment is set and used in FPEF
FPEF	Fluid Physics Experiment Facility	–
GN2	Gas Nitrogen (Gas N_2)	–
GOP	Group Of Picture	the video frame group, are used in MPEG sequence
GOP length	–	one of the encoding parameters of MPEG2
H-D	Heating Disk	the heating side of the liquid bridge
HD	Heating Disk	the heating side of the liquid bridge
HRDL	High Rate Data Link	the communication line in ISS
HX	Heat Exchanger	–
IBIT	Initiated Built-In Test	–
ID	identification	–
IP distance	number of B-pictures between I-picture and P-picture	one of the encoding parameters of MPEG2
IPU	Image Processing Unit	Encoding and recording system for movies.
IR	Infrared Imager	–
ITO	Indium Tin Oxide	ITO is used as the temperature sensor coating and the heater coating on the Heating disk.
L-B	Liquid Bridge	–
LB	Liquid Bridge	–
LS	Limit Switch	–
Mbps	Mega bit per second	–
MCS	Master Controller Subsystem	the control system in IPU
MEIS	Marangoni Experiment In Space	This scientific project in the KIBO pressurized module is a microgravity experiment on fluid physics.
MPEG	Moving Picture Expert Group	–
ND	No Definition	–
S/W	SoftWare	–
SIF	Standard Interchange Format	resolution: 352x240 [pixcel], based on NTSC
SW	SoftWare	–
Sw	Switch	–
TAXI	Transparent Asynchronous Transmitter-Receiver Interface	one of the point to point high speed serial interface
TC	ThermoCouple	–
VCS	Video Compression Subsystem	the video system include DMEs in IPU
VRU	Video Record Unit	the video recorder used M-JPEG in IPU
VSW	Video SWitcher	Video switcher in FPEF