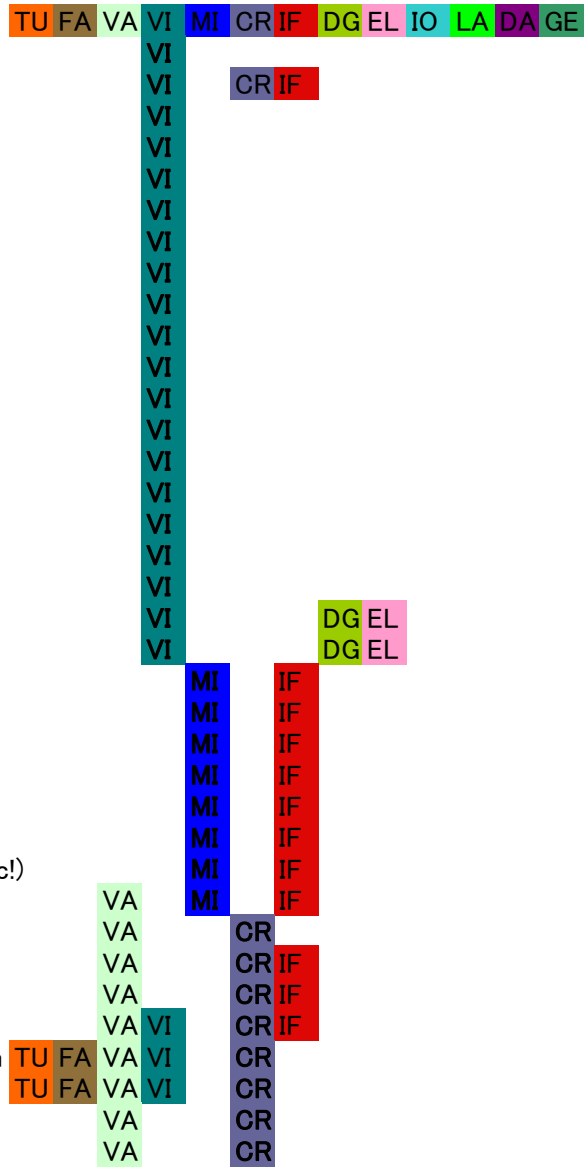
		MISC	Value
4th GAS	spring constant of 4th GAS filter		473kg/s^2
4th GAS	T dependence of spring constant		TBD
4th GAS	loss of GAS filter blades		1e-2
4th GAS	mass of GAS filter joint for wire		<100g
4th GAS	wire length btw 4th GAS filter and PF		2.1m
4th GAS	wire diameter		3.11mm
4th GAS	number of wires		1
4th GAS	wire material		Maraging
4th GAS	wire youg's modulus		186GPa
4th GAS	wire tensile strength		2GPa
4th GAS	loss of wire		TBD
4th GAS	wire length btw 4th GAS filter and CB		2.1m
4th GAS	wire diameter		3.74mm
4th GAS	number of wires		1
4th GAS	wire material		Maraging
4th GAS	wire youg's modulus		186GPa
4th GAS	wire tensile strength		2GPa
4th GAS	total mass suspended by 4th GAS filter		120kg
4th GAS	local sensor for GAS filter		LVDT
4th GAS	local control for GAS filter		Coil
BS	BS radius		19cm
BS	BS thickness		12cm
BS	BS reflectivity		50%
BS	BS HR surface optical loss		50ppm
BS	BS AR surface reflectivity		50ppm
BS	RoC of BS		>100km
BS	BS substrate absorption		1ppm/cm (problematic!)
BS	AR wedge of BS		0.383deg
Cryostat	radiation shield diameter		50cm
Cryostat	radiation shield aperture (diameter)		25cm
Cryostat	cryostat shield aperture (diameter)		25cm
Cryostat	top hole diameter (to SAS)	*	15cm
Cryostat	cryostat cylinder dimension		f=2.4m,t=2cm,h=3.05m
Cryostat	cryostat weight		10t
Cryostat	heat from shield aperture		4W
Cryostat	heat from vacuum duct support		24W



Cryostat	radiation from upper stages	*	10mW			VA	VI		CR	IF								
Cryostat	radiation from BS chamber	*	10mW			VA			CR	IF								
Cryostat	radiation from arm cavity	*	10mW			VA			CR	IF								
Cryostat	heat from radiation shield	*	100mW			VA			CR	IF								
Cryostat	heat from scattering light	*	0mW			VA			CR	IF								
Cryostat	heat from view ports	*	10mW			VA			CR	IF								
Cryostat	heat link thermal conductivity at 10K		4kW/m/K				VI		CR									
Cryostat	number of view ports		1			VA			CR	IF								
Cryostat	cooling time		1week			VA			CR	IF								
Cryostat	warming up time		1month			VA			CR	IF								
Cryostat	vibration at cryostat		TBD	TU	FA	VA	VI		CR	IF								
Cryostat	inner shield resonant frequency		22Hz			VA	VI		CR									
Cryostat	outer shield resonant frequency		24Hz			VA	VI		CR									
Cryostat	inner shield temeprature		8K			VA	VI		CR	IF								
Cryostat	duct shield temperature		80K			VA	VI		CR	IF								
Cryostat	duct emissivity		0.03			VA			CR									
Digital	ADC noise		2uV/rtHz		FA	VA	VI		CR	IF	DG	EL	IO	LA		GE		
Digital	DAC noise		1.5uV/rtHz				VI			IF	DG	EL	IO	LA				
Digital	sampling frequency		16384Hz		FA	VA	VI		CR	IF	DG	EL	IO	LA	DA	GE		
Digital	observation bandwidth		7.4kHz							IF	DG				DA			
Digital	loop time delay		<100usec (>200HzUGF)				VI			IF	DG	EL	IO	LA				
Digital	ADC maximum input voltage		+/−20V		FA	VA	VI		CR	IF	DG	EL	IO	LA		GE		
Digital	DAC maximum output voltage		+/−10V				VI			IF	DG	EL	IO	LA				
Digital	Binary Output voltage		0V or 5V		FA	VA	VI		CR	IF	DG	EL	IO	LA		GE		
Digital	connector		D−sub 9pin or 37pin		FA	VA	VI		CR	IF	DG	EL	IO	LA		GE		
Electronics	accuracy of 90deg for I&Q LO	*	1%							IF		EL						
Electronics	RF PD aperture (high power)	*	3mm							IF		EL						
Electronics	RF PD aperture (low power)	*	3mm							IF		EL						
Electronics	DC PD aperture (high power)	*	3mm							IF		EL						
Electronics	DC PD aperture (low power)	*	3mm							IF		EL						
Electronics	RF PD input power (high power)	*	300mW							IF		EL						
Electronics	RF PD input power (low power)	*	100mW							IF		EL						
Electronics	DC PD input power (high power)	*	100mW							IF		EL						
Electronics	DC PD input power (low power)	*	10mW							IF		EL						
Electronics	RF HOM suppression at LO distributor		TBD							IF		EL						
Electronics	DC power supply		24V							IF		EL						
Electronics	power supply cable selection		TBD							IF		EL						

Electronics	power supply conector selection		TBD							IF	EL			
Electronics	AC cable selection	100V /	AWG14 triplet							IF	EL			
Electronics	AC conector selection		D-sub							IF	EL			
Electronics	RF cable selection		co-axial							IF	EL			
Electronics	RF connector selection		SMA							IF	EL			
Facility	tunnel width/height	TUN	4m	TU	FA	VA								GE
Facility	tunnel tilt	TUN	1/300	TU	FA	VA				IF				GE
Facility	chamber room size (2nd floor)	TUN	8m x 12m	TU	FA	VA				IF				GE
Facility	chamber room size (1st floor)	TUN	20m x 12m	TU	FA	VA			CR	IF				GE
Facility	diamter of borehole for SAS	TUN	1.2m	TU	FA	VA	VI							
Facility	flange flatness	VAC	0.1mm			VA								
Facility	flange thickness	VAC	30mm			VA								
Facility	vacuum level	VAC	2e-7Pa		FA	VA				IF				
Facility	duct height from floor	VAC	1.2m from the floor		FA	VA				IF				
Facility	duct diameter	VAC	80cm		FA	VA				IF				
Facility	position of chambers	VAC	(see MIF doc)		FA	VA				IF				
Facility	number of pumps	VAC	30 per arm		FA	VA								
Facility	pumping speed of ion pump	VAC	1000L/s		FA	VA								
Facility	pumping speed of turbo pump	VAC	2000L/s		FA	VA								
Facility	number of gate valves	VAC	2 per arm (both ends)		FA	VA								
Facility	number of vacuum monitors (chamber)	VAC	1 for each chamber		FA	VA								
Facility	number of vacuum monitors (duct)	VAC	10 per arm		FA	VA								
Facility	beam position monitor (movable target	VAC	10 per arm		FA	VA				IF		IO		
Facility	room temperature	FAC	289K		FA									
Facility	laser room cleanliness	FAC	CLASS 100		FA							IO	LA	
Facility	room cleanliness	FAC	CLASS 1000		FA			MI	CR			IO		
Facility	cleanliness for chamber working	FAC	CLASS 100		FA			MI	CR			IO		
Facility	cleanliness of cryostat body (?)	CRY	CLASS 10000		FA			MI	CR					
Facility	noise level of accelerometers	PEM	TBD		FA									
Facility	noise level of tilt meters	PEM	TBD		FA									
HL (IM-RM)	material		6N Aluminum				VI		CR					
HL (IM-RM)	number		TBD				VI		CR					
HL (IM-RM)	radius of U		TBD											
HL (IM-RM)	length		TBD				VI		CR					
HL (IM-RM)	spring constant		TBD				VI		CR					
HL (IM-RM)	diameter		TBD				VI		CR					
HL (IM-RM)	loss		TBD				VI		CR					

HL (Sh-PF)	material		6N Aluminum	VI	CR		
HL (Sh-PF)	number		7	VI	CR		
HL (Sh-PF)	length		TBD	VI	CR		
HL (Sh-PF)	radius of U		25cm				
HL (Sh-PF)	spring constant		TBD	VI	CR		
HL (Sh-PF)	diameter		1mm	VI	CR		
HL (Sh-PF)	loss		TBD	VI	CR		
HL (PF-IM)	material		6N Aluminum	VI	CR		
HL (PF-IM)	number		5	VI	CR		
HL (PF-IM)	length		TBD	VI	CR		
HL (PF-IM)	radius of U		20cm				
HL (PF-IM)	spring constant		TBD	VI	CR		
HL (PF-IM)	diameter		3mm	VI	CR		
HL (PF-IM)	loss		5e-5	VI	CR		
IM	actuator power on IM		TBD	VI		IF	EL
IM	mass of IM		60kg	VI	CR		
IM	material		Cu	VI	CR		
IM	dimension		310x200x110 mm	VI	CR		
IM	temperature of IM		10K	VI	CR		
IM	emmisivity of surface of IM	*	0.02	VI	CR		
IM	spacific heat of IM		TBD	VI	CR		
IM	thermal conducutivity of IM		TBD	VI	CR		
IM	local sensor for IM		position-sensor	VI	CR		EL
IM	local control for IM		magnet-coil	VI	CR		EL
IM	RRR of material		TBD	VI	CR		
IM fiber	number of wires	*	4	VI	CR		
IM fiber	material		Tungsten	VI	CR		
IM fiber	Young's modulus	*	161GPa	VI	CR		
IM fiber	tensile strength	*	5GPa	VI	CR		
IM fiber	loss		1e-4	VI	CR		
IM fiber	thermal conductivity		TBD	VI	CR		
IM fiber	length		0.4m	VI	CR		
IM fiber	diameter		0.72mm	VI	CR		
IM fiber	density		19250kg/m^3	VI	CR		
IM fiber	temperature		10K	VI	CR		
RM fiber	yaw-mode resonant frequency		TBD	VI	CR		
RM fiber	pitch-mode resonant frequency		TBD	VI	CR		

RM fiber	yaw-mode loss		TBD		VI		CR			
RM fiber	pitch-mode loss		TBD		VI		CR			
RM fiber	yaw-mode moment of inertia		TBD		VI		CR			
RM fiber	pitch-mode moment of inertia		TBD		VI		CR			
IOO	AF RIN (requirement)		TBD					IF	IO	LA
IOO	RF RIN (requirement)		1e-9W/W/rtHz					IF	IO	LA
IOO	FSS gain at 100Hz		300dB					IF	IO	LA
IOO	FSS gain at 1kHz		180dB					IF	IO	
IOO	Ref Cav length		15cm (single FP)						IO	
IOO	Ref Cav finesse		1e4						IO	
IOO	pick-off power for FSS		100mW						IO	
IOO	FSS PD noise level		1e-9V/rtHz						IO	
IOO	COF between EOM and PZT		10kHz					IF	IO	LA
IOO	COF between PZT and MC length	*	a few Hz					IF	IO	LA
IOO	COF between MC length and thermal		TBD					IF	IO	LA
IOO	input angle control range to MC		TBD					IF	IO	
IOO	input angle actuator noise level		TBD					IF	IO	
IOO	RF oscillator phase noise		-160dBc					IF	IO	
IOO	scattered light inside IO chamber		TBD	VA				IF	IO	
IOO	scattered light from IO view port		TBD	VA				IF	IO	
IOO	power attenuation range		100%-0.1%					IF	IO	
IOO	extinction ratio of Faraday Isolator		40dB					IF	IO	
Laser	laser power		180W					IF	IO	LA
Laser	wavelength		1064nm					IF	IO	LA
Laser	free-run frequency noise		100Hz/rtHz at 100Hz					IF	IO	LA
Laser	free-run intensity noise		1e-4 W/W/rtHz					IF	IO	LA
Laser	linewidth		a few kHz					IF	IO	LA
Laser	intensity control range		TBD					IF	IO	LA
Laser	intensity control method		TBD					IF	IO	LA
Laser	chiller temperature		15deg						IO	LA
Laser	Laser temperature		TBD						IO	LA
Laser	Laser temperature control method		water						IO	LA
Laser	frequency control range for EOM		800kHz					IF	IO	LA
Laser	frequency control range for PZT		TBD					IF	IO	LA
Laser	frequency control range for thermal		TBD					IF	IO	LA
MC2	suspension type		Type-C		VI			IF	IO	
MC2	MC-in and MC-out RoC	*	>500km			MI		IF	IO	

MC2	MC-end RoC		40m			MI	IF		IO			
MC2	MC mirror dimension		f100mm, t30mm			MI	IF		IO			
MC2	angle of incidence on MC-end		0.542deg				IF		IO			
MC2	distance of MC-in and MC-out		0.5m				IF		IO			
MC2	beam radius on MC-end		4.377m				IF		IO			
MC2	beam radius on MC-in and MC-out		2.527m				IF		IO			
MC2	MC-end reflectivity		99.99%			MI	IF		IO			
MC2	MC-in and MC-out reflectivity		99.37%			MI	IF		IO			
MC2	cut-off frequency		5.625kHz				IF		IO			
MC2	MC length (roundtrip)		53.333m	VA			IF		IO			
MC2	MC finesse		500	VA		MI	IF		IO			
MC2	output polarization		S-polarization			MI	IF		IO			
MC2	output frequency noise		TBD				IF		IO			
MC2	output intensity noise		TBD				IF		IO			
MC2	output beam jitter		TBD				IF		IO			
MC2	HOM suppression		1e-3				IF		IO			
MC2	control band (FSS slow)		TBD		VI		IF	EL	IO	LA		
MC2	QPD noise		1e-9 V/rtHz				IF	EL	IO			
MC2	(coupling factor from ASC to LSC)		1e-4 m/rad				IF		IO			
MC2	Beam centering error		0.1mm				IF		IO			
MC2	PD dynamic range		TBD				IF	EL	IO			
MC2	QPD dynamic range		TBD				IF	EL	IO			
MIF	contrast defect (alignment etc)	*	0.5%				IF					
MIF	AS POM reflectivity (if any)	*	0	VA	VI		IF					
MIF	(laser power in PRC)		825W				IF		IO	LA		
MIF	(total optical loss in SRC)		2%			MI	IF		IO			
MIF	quantum efficiency (DC PD)		90%				IF	EL	IO			
MIF	demodulation function		square wave				IF		IO			
MIF	differential offset on arm cavities		+/- 2e-12m				IF		IO			
MIF	(DC readout phase)		134.5deg (DRSE)				IF		IO			
MIF	detune phase		3.55deg				IF					
MIF	PRM-PR2 distance		14.761m	VA			IF					
MIF	PR2-PR3 distance		12.067m	VA			IF					
MIF	PR3-BS distance		14.764m	VA			IF					
MIF	SRM-SR2 distance		14.761m	VA			IF					
MIF	SR2-SR3 distance		12.067m	VA			IF					
MIF	SR3-BS distance		14.764m	VA			IF					

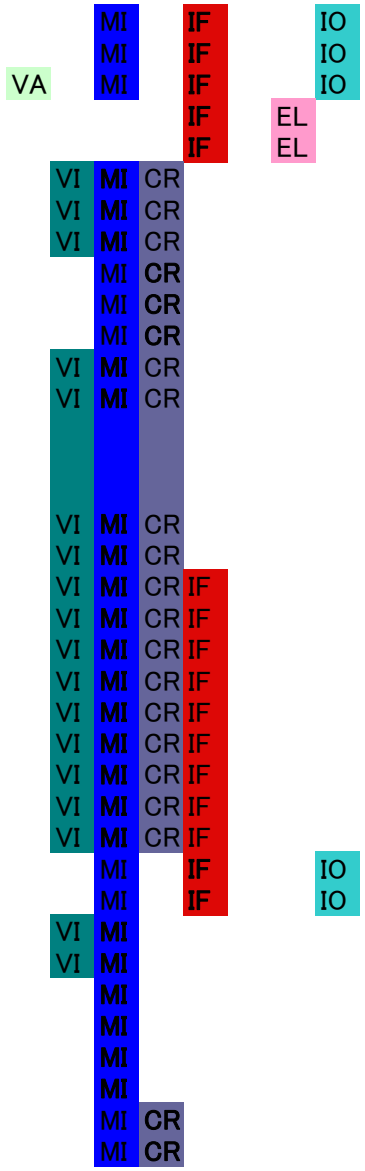
MIF	folding angle		0.6293deg	VA	IF		
MIF	BS-ITM average distance		25.0285m	VA	IF		
MIF	(PRC length)		66.6205m	VA	IF		
MIF	(SRC length)		66.6205m	VA	IF		
MIF	Gouy phase shift in PRC		20deg		IF		
MIF	Gouy phase shift in SRC		20deg		IF		
MIF	arm length	*	3km	VA	IF		
MIF	asymmetry length		3.3310m	VA	IF		
MIF	f1 sideband frequencies		16.875MHz		IF		IO
MIF	f1 sideband types		PM		IF		IO
MIF	f1 sideband modulation depths	*	0.2 at IFO		IF		IO
MIF	f2 sideband frequencies		45MHz		IF		IO
MIF	f2 sideband types		PM		IF		IO
MIF	f2 sideband modulation depths	*	0.2 at IFO		IF		IO
MIF	f3 sideband freq (if any)		39.375MHz		IF	EL	IO
MIF	f3 sideband types (if any)		AM		IF	EL	IO
MIF	f3 sideband modulation depths (if any)		TBD		IF		IO
MIF	MZ configuration		single, if any		IF		IO
MIF	tilt noise on each WFS DOF		TBD	VI	IF		
MIF	(coupling factor from ASC to LSC)	*	1e-4m/rad	VI	IF		
MIF	Beam centering error on TM	*	0.1mm	VI	IF		
MIF	QPD dynamic range		TBD		IF	EL	
MIF	QPD noise level for transmitted light	*	1e-9V/rtHz		IF	EL	
MIF	Oplev QPD noise level		TBD		IF	EL	
MIF	Oplev control band width for pit, yaw	*	3Hz		IF	EL	
MIF	maximum DC voltage for demo signal		100mV		IF	EL	
MIF	electric noise on demo signal		1e-9V/rtHz		IF	EL	
MIF	CARM UGF		10kHz	VI	IF	EL	
MIF	DARM UGF		200Hz	VI	IF	EL	
MIF	PRCL UGF		20Hz	VI	IF	EL	
MIF	MICH UGF		20Hz	VI	IF	EL	
MIF	SRCL UGF		20Hz	VI	IF	EL	
MIF	PRCL FF gain		100		IF		
MIF	MICH FF gain		100		IF		
MIF	SRCL FF gain		100		IF		
MIF	CARM signal extraction port		REFL	VA	IF		
MIF	DARM signal extraction port		OMCout	VA	IF		

MIF	PRCL signal extraction port		POP	VA IF
MIF	MICH signal extraction port		REFL	VA IF
MIF	SRCL signal extraction port		REFL	VA IF
MIF	RF PD (high power) dynamic range		TBD	IF EL
MIF	RF PD (low power) dynamic range		TBD	IF EL
MIF	DC PD (high power) dynamic range		TBD	IF EL
MIF	DC PD (low power) dynamic range		TBD	IF EL
MIF	DC PD noise level for transmitted light		TBD	IF EL
MIF	Green Laser finesse in arms		19 (ITM80%-ETM90%)	MI IF
MIF	Green Laser power		100mW	IF IO LA
MIF	Green laser's frequency gap (X and Y)		100MHz	IF IO LA
MIF	Green Laser phase lock tightness		TBD	IF IO LA
MIF	Green laser Injection Point		PR3 and SR3	VA IF IO
MIF	BS reflectivity for green		<1%	MI IF
MIF	PR2, SR2 reflectivity for green		<1%	MI IF
MIF	PR3, SR3 reflectivity for green		<1%	MI IF
MIF	rms fluctuation of DARM		1e-14m	VI IF IO
MMT	suspension type		Type-C	VI IO
MMT	MMT mirror dimension		f100mm, t30mm	MI IO
MMT	MMT1 RoC		20.6m	MI IO
MMT	MMT2 RoC		26.1m	MI IO
MMT	distance of MC-out and MMT1		5.8m	IF IO
MMT	distance of MMT1 and MMT2		5.6m	IF IO
MMT	distance of MMT2 and PRM		5.8m	IF IO
OMC	number of mirrors		4	MI IF IO
OMC	OMC optical loss	*	1%	MI IF IO
OMC	OMC length	*	38cm	VA IF IO
OMC	OMC finesse	*	1000 (too high for 1% loss)	IF IO
OMC	OMC displacement noise		TBD	VI IF IO
OMC	actuator range		TBD	IF EL IO
OMC	actuator noise level		TBD	IF EL IO
OMC	RF reduction ratio		110dB	IF IO
OMC	dither frequency for length control		TBD	IF DG IO
OMC	dither frequency for angle control		TBD	IF DG IO
OMC	dither PD noise level		1e-9 V/rtHz	IF EL IO
OMC	dither QPD noise level		1e-9 V/rtHz	IF EL IO
PMC	number of mirrors		4	VI MI EL IO

PMC	cavity length		48.8cm	IO
PMC	finesse		155	IO
PMC	RF PD noise level		1e-9 V/rtHz	IO
PMC	actualtor range		TBD	EL IO
PMC	actuator noise level		TBD	EL IO
PRMs	PM1 radius		12.5cm	VI MI
PRMs	PM1 thickness		10cm	VI MI
PRMs	PM2 radius		12.5cm	VI MI
PRMs	PM2 thickness		10cm	VI MI
PRMs	PM3 radius		12.5cm	VI MI
PRMs	PM3 thickness		10cm	VI MI
PRMs	PRM reflectivity		90%	MI IF
PRMs	PRM optical loss		100ppm	MI IF
PRMs	RoC of PRM		370m	MI IF IO
PRMs	RoC of PR2		4.17m	MI IF IO
PRMs	RoC of PR3		32.34m	MI IF IO
PRMs	wedge angle of PRM	*	0.3deg	VA MI IF IO
RM	mass of RMTM		30kg	VI CR
RM	material of RMTM		Cu	VI CR
RM	outer diameter		29cm	VI CR
RM	inner diameter		26cm	VI CR
RM	thickness		26cm	VI CR
RM	temperature of RMTM		20K	VI CR
RM	emmisivity of surface of RMTM		0.02	VI CR
RM	specific heat of RMTM		TBD	VI CR
RM	thermal conducutivity of RMTM		TBD	VI CR
RM	local sensor of RM		position-sensor, oplev	VI CR EL
RM	local actuator of RM		ESD	VI CR EL
RM	RRR of material		TBD	VI CR EL
RM fiber	material		BeCu	VI CR
RM fiber	thermal conductivity		TBD	VI CR
RM fiber	length		30cm	VI CR
RM fiber	diameter		0.4mm	VI CR
RM fiber	number of fibers		4	VI CR
RM fiber	Young's modulus		130GPa	VI CR
RM fiber	density		8360kg/m^3	VI CR
RM fiber	effective temperature		16K	VI CR

RM fiber	loss		5e–6				VI		CR					
RM fiber	yaw–mode resonant frequency		TBD				VI		CR					
RM fiber	pitch–mode resonant frequency		TBD				VI		CR					
RM fiber	yaw–mode loss		TBD				VI		CR					
RM fiber	pitch–mode loss		TBD				VI		CR					
RM fiber	yaw–mode moment of inertia		TBD				VI		CR					
RM fiber	pitch–mode moment of inertia		TBD				VI		CR					
SAS	Vertical horizontal coupling	worse	1/200	TU	FA	VA	VI	MI		IF				GE
SAS	TM seismic motion	Type–	4e–20m/rtHz at 10Hz			VA	VI	MI		IF				GE
SAS	PRM seismic moiton	Type–I	2e–21m/rtHz at 10Hz				VI			IF				
SAS	SRM seismic motion	Type–I	2e–21m/rtHz at 10Hz				VI			IF				
SAS	OMC seismic motion		TBD				VI			IF			IO	
SAS	adjustable distance (DC)	*	1cm				VI			IF		EL		
SAS	actuation range (AC)		TBD				VI			IF		EL		
SAS	actuator noise		TBD				VI					EL		
SAS	TF from actuators to test mass		TBD				VI	MI		IF				
SAS	RMS displacement		0.1um				VI	MI		IF	DG			
SAS	RMS velocity		0.1um/s				VI	MI		IF	DG			
SAS	RMS pitch		TBD				VI	MI		IF	DG			
SAS	RMS yaw		TBD				VI	MI		IF	DG			
SAS	speed of sound		TBD	TU	FA		VI							GE
SAS	CMRR (3km)		TBD	TU	FA		VI							GE
SAS	CMR cutoff frequency		TBD	TU	FA		VI							GE
SAS	local seismic motion at center		2e–9 m/rtHz at 1Hz	TU	FA		VI		CR					GE
SAS	local seismic motion at itmx		2e–9 m/rtHz at 1Hz	TU	FA		VI		CR					GE
SAS	local seismic motion at itmy		2e–9 m/rtHz at 1Hz	TU	FA		VI		CR					GE
SAS	local seismic motion at etmx		2e–9 m/rtHz at 1Hz	TU	FA		VI		CR					GE
SAS	local seismic motion at etmy		2e–9 m/rtHz at 1Hz	TU	FA		VI		CR					GE
SRMs	SM1 radius		12.5cm				VI	MI						
SRMs	SM1 thickness		10cm				VI	MI						
SRMs	SM2 radius		12.5cm				VI	MI						
SRMs	SM2 thickness		10cm				VI	MI						
SRMs	SM3 radius		12.5cm				VI	MI						
SRMs	SM3 thickness		10cm				VI	MI						
SRMs	SRM reflectivity		85%					MI		IF				
SRMs	SRM optical loss		100ppm					MI		IF				
SRMs	RoC of SRM		370m					MI		IF			IO	

SRMs	RoC of SR2		4.17m	
SRMs	RoC of SR3		32.34m	
SRMs	wedge of SRM	*	0.3deg	
TM	actuator power on ITM		TBD	
TM	actuator power on ETM		TBD	
TM	material of TM		Sapphire	
TM	dimension		f250 x t150	
TM	temperature		20K	
TM	emmisivity of surface of TM		TBD	
TM	specific heat of TM		0.69 J/K/kg	
TM	thermal conducutivity of TM		1.57e4 W/m/K	
TM	Outer Diameter		25cm	
TM	Outer Diameter Flat to Flat	*	24.6cm	
TM	local sensor of TM		position-sensor, oplev	
TM	local actuator of TM		ESD	
TM	RRR of material		TBD	
TM	scratches and sleeks on two surfaces		TBD	
TM	point defects on two surfaces		TBD	
TM	central region surface rms		0.3nm (d<12cm)	
TM	outer region surface rms	*	1nm (d>12cm)	
TM	AR side surface flatness		TBD	
TM	ROC seen from AR side		TBD	
TM	coating / substrate homogeneity		TBD	
TM	dr/dt of AR (reflectivity change)		TBD	
TM	point scattering		TBD	
TM	surface quality after coating		TBD	
TM	birefringence		TBD	
TM	beam radius on ETM		4.53cm	
TM	beam radius on ITM		3.43cm	
TM	mirror bulk density of ETM		4000 kg/m^3	
TM	mirror buld density of ITM		4000 kg/m^3	
TM	Young's modulus of ETM substrate		400GPa	
TM	Young's modulus of ITM substrate		400GPa	
TM	mirror bulk Poisson ratio of ETM		0.29	
TM	mirror bulk Poisson ratio of ITM		0.29	
TM	mirror thermal expansion of ETM		5.6e-9 1/K	
TM	mirror thermal expansion of ITM		5.6e-9 1/K	



TM	mirror specific heat of ETM		0.69 J/K/kg	MI	CR	
TM	mirror specific heat of ITM		0.69 J/K/kg	MI	CR	
TM	mirror thermal conductivity of ETM		1.57e4 W/m/K	MI	CR	
TM	mirror thermal conductivity of ITM		1.57e4 W/m/K	MI	CR	
TM	mirror mechanical loss of ETM		1e-8	MI	CR	
TM	mirror mechanical loss of ITM		1e-8	MI	CR	
TM	silica coating Youngs modulus		72GPa	MI	CR	
TM	tantala coating Youngs modulus		140GPa	MI	CR	
TM	silica coating Poisson ratio		0.17	MI	CR	
TM	tantala coating Poisson ratio		0.23	MI	CR	
TM	silica coating loss		3e-4	MI	CR	
TM	tantala coating loss		5e-4	MI	CR	
TM	silica coating specific heat per volume		1.64e6 J/K/m^3	MI	CR	
TM	tantala coating specific heat per volume		2.10e6 J/K/m^3	MI	CR	
TM	silica coating thermal expansion		5.1e-7 1/K	MI	CR	
TM	tantala coating thermal expansion		3.6e-6 1/K	MI	CR	
TM	silica coating thermal conductivity		1.38 W/m/K	MI	CR	
TM	tantala coating thermal conductivity		33 W/m/K	MI	CR	
TM	number of layers on ETM		18	MI	CR	
TM	number of layers on ITM		9	MI	CR	
TM	coating absorption	challer	0.5ppm	MI	CR	
TM	AR surface absorption		1ppm	MI	CR	
TM	ETM reflectivity		0.999945	MI		IF
TM	ITM reflectivity		0.996	MI		IF
TM	ETM optical loss		45ppm	MI		IF
TM	ITM optical loss		45ppm	MI		IF
TM	optical loss imbalance		+/-15ppm	MI		IF
TM	finesse imbalance		0.5%	MI		IF
TM	ITM substrate optical loss		20ppm/cm	MI	CR	IF
TM	ITM AR surface optical loss	*	1000ppm	MI		IF
TM	ETM mass		30kg	MI		IF
TM	ITM mass		30kg	MI		IF
TM	RoC error of ETM	*	1%	MI		IF
TM	RoC error of ITM	*	1%	MI		IF
TM	RoC of ETM		7km	MI		IF
TM	RoC of ITM		>500km	MI		IF
TM	RoC imbalance in two arms	*	0.5%	MI		IF

TM	wedge angle of ETM	*	0.3deg		VA		MI		IF					
TM	wedge angle of ITM	*	0.3deg		VA		MI		IF					
TM fiber	uniformity of TM fiber		none			VI		CR						
TM fiber	material		Sapphire			VI		CR						
TM fiber	thermal conductivity	*	7kW/m/K at 20K			VI		CR						
TM fiber	length		30cm			VI		CR						
TM fiber	diameter		1.6mm			VI		CR						
TM fiber	number of fibers		4			VI		CR						
TM fiber	Young's modulus		400GPa			VI		CR						
TM fiber	density		4000kg/m^3			VI		CR						
TM fiber	effective temperature		16			VI		CR						
TM fiber	loss		2e-7			VI		CR						
TM fiber	yaw-mode resonant frequency		TBD			VI		CR						
TM fiber	pitch-mode resonant frequency		TBD			VI		CR						
TM fiber	yaw-mode loss		TBD			VI		CR						
TM fiber	pitch-mode loss		TBD			VI		CR						
TM fiber	yaw-mode moment of inertia		TBD			VI		CR						
TM fiber	pitch-mode moment of inertia		TBD			VI		CR						
Env sensor	number of thermometer in laser room		1 (low reso)	FA		VI			IF	DG	IO	LA		GE
Env sensor	number of thermometer in chambers		5 (low reso)	FA		VI			IF	DG	IO	LA		GE
Env sensor	number of thermometer in center room		2	FA		VI			IF	DG				GE
Env sensor	number of thermometer in end rooms		4	FA		VI			IF	DG				GE
Env sensor	number of thermometer in geo area		4	FA		VI			IF	DG				GE
Env sensor	number of thermometer in tunnels		10	FA		VI			IF	DG				GE
Env sensor	number of hygrometer in center room		2	FA		VI			IF	DG				GE
Env sensor	number of hygrometer in end rooms		4	FA		VI			IF	DG				GE
Env sensor	number of hygrometer in geo area		4	FA		VI			IF	DG				GE
Env sensor	number of hygrometer in tunnels		10	FA		VI			IF	DG				GE
Env sensor	number of barometer in center room		1	FA		VI			IF	DG				GE
Env sensor	number of barometer in end rooms		2	FA		VI			IF	DG				GE
Env sensor	number of barometer in geo area		4	FA		VI			IF	DG				GE
Env sensor	number of barometer in tunnels		2	FA		VI			IF	DG				GE
Env sensor	number of accelerometer in laser room		1 (vibration monitor)	FA		VI			IF	DG	IO	LA	DA	GE
Env sensor	number of accelerometer in chambers		5 (vibration monitor)	FA		VI			IF	DG	IO	LA	DA	GE
Env sensor	number of accelerometer in center room		1	FA		VI			IF	DG			DA	GE
Env sensor	number of accelerometer in end rooms		2	FA		VI			IF	DG			DA	GE
Env sensor	number of accelerometer in geo area		4	FA		VI			IF	DG			DA	GE

Env sensor	number of accelerometer in tunnels	0
Env sensor	number of particle meter in center room	1
Env sensor	number of particle meter in end rooms	2
Env sensor	number of particle meter in geo area	2
Env sensor	number of seismometer in tunnels	2
Env sensor	number of microphone in center room	2
Env sensor	number of microphone in end rooms	2