4/11/2001 14:22

Summary	running	test stand	data copies	(maximum) extra power	spares	Max		Ordered	Assumed Wastage			
Alpha	16	9	0	14	4	43	Alpha	38	2	only 7 extra power, so 36 max	trim test stand 4 by 2 (cannibalize for max power?)	
MBT	11	8	0	4	3	26	MBT	30	4	use prototype for HWFW	trim more? 3 extra power for 5 workers, 1 CTT	
SFO	4	0	16	4	3	27	SFO	28	1	probably OK: 2 extra in mu, 1 HWFW, 1 CTT		
FIC	7	0	0	1	2	10	FIC	12	3	actually, just spec change		
SLIC	16	1	0	4	2	23	SLIC	20	-3	20 so far	still looks like want 4 more	proto?
CIC	14	0	0	1	2	17	CIC	18	1			
Bit3	6	5	0	0	3	14	Bit3	14	0	one 617 owned by Nevis…	sell within D0?	
VBD	6	4	0	0	2	12	VBD				Did we tell Cutts about all these?	
VTM	7	0	0	1	2	10	VTM	12	3	actually, just spec change	sell within D0?	
Magic Bus	6	5	0	0	3	14	Magic Bus	14	0			
blanks	35	47	0	0	0	82	blanks	45	0	a guess…look at location in test crates more		
FTRV	3	3	0	0	1	7	useable for	0	0	not really that many at the test stand		

Fallbacks: probably too late to save now…	would have to SELL equipment, break contracts with no charge for parts…		
power "by hand" for "data source" crate	4K	? Half a rack? Not likely…	
delete MSU crate	27K	2alpha, 2 mbt, 1 sfo	
merge Worker crates	24K	2 alpha, 2 mbt	
only 3 more SLICS	10 K		
recable to do tests:	6K	4 SFO's, say	2 tracking, 2 mu but not cal/global?
	70 K total…		

L2 Cal Crate

Slot	Contents	Ins	Outs	Data Copie	Outs	Max Processing		
	Base Equipment		**12**					
1	Bit3							
2	VBD							
3	FTRV							
4	FIC		4					
5	FIC		4					
6	FIC		2					
7	Admin							1st Mbus slot
8	x							
9	Alpha	e						
10	x							
11	Alpha	j						useable for testing ?
12	x							
13	Alpha	etmiss						
14	x							
15	blank					Alpha		
16	blank					x		
17	blank					Alpha		
18				SFO	12	x		
19				SFO	12	MBT	5th worker	
20	MBT		4					
21	Pilot MBT		8					

Summary				MAX	
Alpha	4		2	6	Alpha
MBT	2		1	3	MBT
SFO	0	2		2	SFO
FIC	3			3	FIC
SLIC				0	SLIC
CIC				0	CIC
Bit3	1			1	Bit3
VBD	1			1	VBD
blanks	3			3	blanks
FTRV	1			1	FTRV
slot count	21				

L2 CTT

Slot	Contents								
	Base Equipment	Ins	Outs **14**	Data Copie	Outs	Max Processing		18	
1	Bit3								
2	VBD								
3	blank					FIC		4	only if receiving both CTT and STT
4	blank					SFO		8	only if receiving both CTT and STT
5				SFO	12				
6				SFO	12				
7	Admin								1st Mbus slot
8	x								
9	Alpha	pt							
10	x								
11	Alpha	impact							useable for testing ?
12	x								
13	blank					Alpha	pt CTT		only if receiving both CTT and ST ,or more workers
14	blank					x			
15	blank					Alpha	Zvtx?		
16	blank					x			
17	blank					Alpha			
18	blank					x			
19	blank					MBT		4	only if receiving both CTT and ST , or 5 workers
20	MBT		6						
21	Pilot MBT		8						

Summary				MAX	
Alpha	3		3	6	Alpha
MBT	2		1	3	MBT
SFO	0	2	1	3	SFO
FIC			1	1	FIC
SLIC				0	SLIC
CIC				0	CIC
Bit3	1			1	Bit3
VBD	1			1	VBD
blanks	9			9	blanks
FTRV	0			0	FTRV
slot count	21				

L2 PS Crate

Slot	Contents	Ins	Outs	Data Copie	Outs	Max Processing		
	Base Equipment		**14**					
1	Bit3							
2	VBD							
3	FTRV							
4	FIC		4					
5	FIC		4					
6	FIC		4					
7	Admin							1st Mbus slot
8	x							
9	Alpha	cps						
10	x							
11	Alpha	fps						useable for testing ?
12	x							
13				SFO	12	Alpha		
14				SFO	12	x		
15	blank					Alpha	2nd fps?	
16	blank					x		
17	blank					Alpha		
18	blank					x		
19	blank					MBT	5th worker	
20	MBT		4					
21	Pilot MBT		8					

Summary				MAX	
Alpha	3		3	6	Alpha
MBT	2		1	3	MBT
SFO	0	2		2	SFO
FIC	3			3	FIC
SLIC				0	SLIC
CIC				0	CIC
Bit3	1			1	Bit3
VBD	1			1	VBD
blanks	5			5	blanks
FTRV	1			1	FTRV
slot count	21				

L2 Muon CIC Crate

Slot	Contents							
	Base Equipment	Ins	Outs	Data Copies	Outs	Max Processing		
1	CIC		11					
2	CIC		11					
3	CIC		11					
4	CIC		11					
5	CIC		10					
6	CIC		11					
7	CIC		10					
8	CIC		10					
9	CIC		9					
10	CIC		10					
11	CIC		10					useable for testing ?
12	CIC		11					
13	CIC		12					
14	CIC		12					
15	blank					CIC	for L1 trigger?	
16	SFO-MSCE		12					
17	SFO-MSCW		12					
18	blank					SFO	12	
19	blank					SFO	12	
20				SFO-SLIC 1	12	copies for one SLIC, max # inputs		
21				SFO-SLIC 2	12			

Summary					MAX	
Alpha					0	Alpha
MBT					0	MBT
SFO	2	2	2		6	SFO
FIC					0	FIC
SLIC					0	SLIC
CIC	14		1		14	CIC
Bit3					0	Bit3
VBD					0	VBD
blanks	3				3	blanks
FTRV	0				0	FTRV
slot count	21					

L2 Mu Cen

Slot	Contents								
	Base Equipment	Ins	Outs **13**	Data Copies	Outs	Max Processing			
1	Bit3								
2	VBD								
3	SLIC		3						
4	SLIC		13						
5	SLIC		13						
6	SLIC		12						
7	Admin							1st Mbus slot	
8	x								
9	Alpha								
10	x								
11	SLIC		12					useable for testing ?	
12	SLIC		12						
13	SLIC		12						
14	SLIC		12						
15	SLIC		10						
16	SLIC		10						
17	SLIC		12						
18				SFO-MBT C1	12	Alpha			
19	SFO-SCL C		11	other SFO in Mu Fwd		x			
20	MBT		5						
21	Pilot MBT		8						

Summary				MAX	
Alpha	2		1	3	Alpha
MBT	2			2	MBT
SFO	1	1		2	SFO
FIC				0	FIC
SLIC	11			11	SLIC
CIC				0	CIC
Bit3	1			1	Bit3
VBD	1			1	VBD
blanks	0			0	blanks
FTRV	0			0	FTRV
slot count	21				

L2 Mu Fwd

Slot	Contents									
	Base	Ins	Outs	Data Copies	Outs		Max Processing			
	Equipment		**7**						**11**	
1	Bit3									
2	VBD									
3	FTRV									
4	SLIC		4							
5	SLIC		12							
6	SLIC		12							
7	Admin						1st Mbus slot			
8	x									
9	Alpha									
10	x									
11	blank						Alpha	SLIC		useable for testing ?
12	blank						x			
13	SLIC		12							
14	SLIC		12							
15	blank						SLIC			
16	blank						SLIC			lose data copy at 7 slics
17				SFO-MBT C2	10		central		12	
18				SFO-MBT F1	10		fwd		12	
19	SFO-SCL F		5						9	
20	blank						MBT		3	
21	Pilot MBT		7						8	

	Summary				MAX		
	Alpha		2		1	3	Alpha
	MBT		1		1	2	MBT
	SFO		1	2		3	SFO
	FIC					0	FIC
	SLIC		5		4	9	SLIC
	CIC					0	CIC
	Bit3		1			1	Bit3
	VBD		1			1	VBD
	blanks		5			5	blanks
	FTRV		1			1	FTRV
	slot count		21				

L2 Global Crate

Slot	Contents	Ins	Outs	Data Copie	Outs	Max Processing		
	Base Equipment		**13**					
1	Bit3							
2	VBD							
3	FIC		1					
4				SFO	12			
5				SFO	12			
6	blank					SFO	12	2 for L1SC 8: add L1 HWFW
7	Admin							1st Mbus slot
8	x							
9	Alpha							
10	x							
11	blank					Alpha		useable for testing ?
12	blank					x		
13	blank					Alpha		
14	blank					x		
15	blank					Alpha		
16	blank					x		
17	blank					Alpha		
18	blank					x		
19	blank							
20	MBT		5					
21	Pilot MBT		8					

Summary				MAX	
Alpha	2		4	6	Alpha
MBT	2			2	MBT
SFO	0	2	1	3	SFO
FIC	1			1	FIC
SLIC				0	SLIC
CIC				0	CIC
Bit3	1			1	Bit3
VBD	1			1	VBD
blanks	10			10	blanks
FTRV	0			0	FTRV
slot count	21				

Test Stand: "Global" crate

Slot	Contents						
	Base	Ins	Outs	Data Copie	Outs	Max Processing	
	Equipment		**15**				
1	Bit3						
2	VBD						
3	blank						
4	blank						
5	blank						
6	blank						
7	Admin						1st Mbus slot
8	x						
9	Alpha						
10	x						
11	blank						useable for testing ?
12	blank						
13	blank						
14	blank						
15	blank						
16	blank						
17	blank						
18	blank						
19	blank						
20	MBT		7				
21	Pilot MBT		8				

Summary		MAX	
Alpha	2	2	Alpha
MBT	2	2	MBT
SFO	0	0	SFO
FIC	0	0	FIC
SLIC		0	SLIC
CIC		0	CIC
Bit3	1	1	Bit3
VBD	1	1	VBD
blanks	13	13	blanks
FTRV	1	1	FTRV
slot count	22		

Test Stand "multiworker" crate

Slot	Contents						
	Base	Ins	Outs	Data Copie	Outs	Max Processing	
	Equipment		**15**				
1	Bit3						
2	VBD						
3	blank						
4	blank						
5	blank						
6	blank						
7	Admin						1st Mbus slot
8	x						
9	Alpha						
10	x						
11	Alpha						useable for testing ?
12	x						
13	blank						
14	blank						
15	blank						
16	blank						
17	blank						
18	blank						
19	blank						
20	MBT		7				
21	Pilot MBT		8				

Summary		MAX	
Alpha	3	3	Alpha
MBT	2	2	MBT
SFO	0	0	SFO
FIC	0	0	FIC
SLIC		0	SLIC
CIC		0	CIC
Bit3	1	1	Bit3
VBD	1	1	VBD
blanks	11	11	blanks
FTRV	1	1	FTRV
slot count	22		

Test 2: SLIC/Alpha Crate

Slot	Contents							
	Base	Ins	Outs	Data Copie	Outs		Max Processing	
	Equipment		**13**					
1	Bit3							
2	VBD							
3	blank							
4	blank							
5	blank							
6	blank							
7	Admin							1st Mbus slot
8	x							
9	Alpha							
10	x							
11	blank							useable for testing ?
12	blank							
13	blank							
14	blank							
15				SFO		12	to land SLIC inputs	
16				SFO		12	"	
17	SLIC							
18	blank							
19	blank							
20	MBT		5					
21	Pilot MBT		8					

Summary			MAX	
Alpha	2		2	Alpha
MBT	2		2	MBT
SFO	0	2	2	SFO
FIC	0		0	FIC
SLIC	1		1	SLIC
CIC			0	CIC
Bit3	1		1	Bit3
VBD	1		1	VBD
blanks	10		10	blanks
FTRV	1		1	FTRV
slot count	22			

Test 3: Local Data Source

Slot	Contents	Ins	Outs	Data Copie	Outs	Max Processing	
	Base Equipment						
1	Bit3						
2	blank						
3	blank						
4	blank						
5	blank						
6	blank						
7	Alpha						1st Mbus slot
8	x						
9	Alpha						
10	x						
11	blank						useable for testing ?
12	blank						
13	Az SLIC Source			needs CIC--where can it live?			
14	blank						
15	blank						
16	blank						
17	blank						
18	blank						
19	blank						
20	mbt		2	use prototypes			
21	mbt		2	use prototypes			

Summary			MAX	
Alpha	0		0	Alpha
MBT	0	0	0	MBT
SFO	0		0	SFO
FIC	0		0	FIC
SLIC			0	SLIC
CIC			0	CIC
Bit3	1		1	Bit3
VBD			0	VBD
blanks	13		13	blanks
FTRV	0		0	FTRV
slot count	14			

Test crate UIC

Slot	Contents	Ins	Outs	Data Copie	Outs	Max Processing	
	Base Equipment						
1	Bit3						
2	VBD						
3	blank						
4	blank						
5	blank						
6	blank						
7	Admin						1st Mbus slot
8	x						
9	Alpha						
10	x						
11	blank						useable for testing ?
12	blank						
13	blank						
14	blank						
15	blank						
16	blank						
17	blank						
18	blank						
19				SFO	for testing		
20	MBT						
21	Pilot MBT						

Summary				MAX	
Alpha	2			2	Alpha
MBT	2			2	MBT
SFO	0		1	1	SFO
FIC	0			0	FIC
SLIC				0	SLIC
CIC				0	CIC
Bit3	1			1	Bit3
VBD	1			1	VBD
blanks				0	blanks
FTRV	0			0	FTRV
slot count	9				

2-May-00

Time Line for Crates

JTL Crate #	original purchaser	Date	Usage	Date	Usage	Date	Usage
VIPA 1	Marvin	Jun-98	MSU Swe	May-00	return to Marvin 1		
VIPA 2	Marvin	Jun-98	UIC Swe/Alpha	May-00	return to Marvin 2		
VIPA 3	Marvin	Jun-98	Umd MBT	May-00	return to Marvin 3		
VIPA 4	Marvin	Jan-99	Saclay FIC	May-99	prep/Test1	May-00	return to Marvin 4
VIPA 5	Marvin	Jan-99	Nevis SLIC/STT	Aug-00	return to Marvin 6		
VIPA 6	Marvin	Aug-99	UMD Rack Proto	Jul-00	return to Marvin 5		
VIPA 7	MSU	Oct-99	Test 3				
VIPA 8	MSU	Jun-00	Global (1)				
VIPA 9	NIU	Jun-00	Mu Central (2)				
VIPA 10	NIU	Dec-99	Nebraska CIC/SFO	Dec-00	Mu Fwd (3)		
VIPA 11	L2 FNAL	Jan-00	Test 2				
VIPA 12	L2 FNAL	Jul-00	Cal (4)				
VIPA 13	L2 FNAL	Jul-00	PS (5)				useable for testing ?
VIPA 14	L2 FNAL	Jul-00	CTT (6)				
VIPA 15	L2 FNAL	May-00	Test 1				
VIPA 16	L2 FNAL	May-00	UIC/Spare 2				
VIPA 17	L2 FNAL	Apr-00	Test 4				
VIPA 18	L2 FNAL	May-00	Umd/Spare 1				
VME 19	*Marvin 6u*		Mu CIC				
VME 20	*Muon 9u*	Jun-99	Test Stand 0				

VIPA destinations:	6	return to Marvin
	2	L2 spare
	6	Install MCH
	4	Install test stand
	18	

	baseline	1st year	"minimum"	min commission	
Test Stand Crate 1	2	2	2	2	"global"
Test Stand Crate 2	3	3	3	3	"multiprocessor"
Test Stand Crate 3	2	2	0	0	2nd preprocessor test
Test Stand Crate 4	0	0	0	0	data source uses prototypes
Global	2	2	2	2	
Cal	4	4	4	0	Oct
PS	3	3	2	0	Sept?
CTT	4	2	2	0	min is no stt; L1 in Sept?
Mu	4	4	2	2	one crate; L1 in June
total	**24**	**22**	**17**	**9**	**imaginable partial production**
spare/extra power	14	16	21	29	
	38	38	38	38	
pre-production	2	2	2	2	as good as final cards
spare parts	10	10	10	10	but some needed by CDF too
old prototypes	2	2	2	2	useable for testing ?

We don't have enough parts to build the system twice.
Could build all baseline workers twice

Administrators:				
test stand	3			
real system	6			
total admin	9	9	7	4
workers	15	13	10	5