Names and Type Numbers of VLBA Racks and Modules
(Revision of VLBA Electronics Memo No. 66)

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This memorandum provides a list of recommended numbers and names for VLBA modules. Here the term module is used to include front ends and similar units which may be interchanged for maintenance. The names are those that will appear on the modules and are therefore chosen to be brief as well as descriptive. The letters in the type numbers which designate subsystems are based on the scheme outlined in VLA Technical Report No. 31, p. 9-3. These designations are as follows:

D	=	Digital Signal Processing
F	=	Front End
L	=	Local Oscillator
M	=	Monitor and Control (General)
S	=	Subreflector Control
T	=	Signal Transmission, IF, and Baseband
P	=	Power Supply

Type numbers begin with 101 to distinguish VLBA modules from VLA modules. Type numbers of modules designed by the Haystack group begin with 121. Under package type, the number preceding the letter W specifies the module width in units of 1.375 inches. The part number and revision refer to the top assembly drawing.

This module list should still be regarded as provisional. Note that some of the module numbers have been revised since publication of VLBA Electronics Memos Nos. 59 and 66.

Racks in the electronics system are given descriptive names and reference letters as follows:

Rack A	Front End Interface Rack
Rack B	LO/IF Rack
Rack C	Master LO Rack
Rack D	Data Acquisition Rack

To refer to positions of bins and modules, bins within each rack are designated A, B, C, etc. starting from the top of the rack, and slots within a bin are designated 1 through 12 from left to right as viewed from the front of the bin.

PROVISIONAL TABLE OF VLBA MODULES

Type Number	Module Name	Package Type	Part Number	Current Revision
D121	Sampler	2W		
D122	Output Rate Synthesizer	Special		
D123	Formatter	Special		
F102	330/610 MHz Front End	Special	C53201A002	
F103	1.5 GHz Front End	Special	D53203A001	
F104	2.3 GHz Front End	Special		
F105	4.8 GHz Front End	Special	D53205A001	
F106	8.4 GHz Front End	Special	D53200A005-1	
F107	10.7 GHz Front End	Special	D53200A005-2	
F108	15 GHz Front End	Special	D53200A005-3	
F109	23 GHz Front End	Special	D53200A005-4	
F110	43 GHz Front End	Special		
F111	86 GHz Front End	Special		
F112	6.1 GHz Front End	Special		
F117	Front-End Interface	1W	D53510A001	
F118	330/610 MHz Adapter	2W	D53510A002	
L101	Maser Interface	2W		
L102	LO Transmitter	2W		
L103	Round-Trip Monitor	2W		
L104	2-16 GHz Synthesizer	3W	D53300A001	
L105	LO Receiver	2W		
L106*	9.4 GHz Oscillator	2W		
L107	Switch Driver	2W	D53303A001	
L108	Station Timer	1W	D53311A001	
L121	5 MHz Distributor	2W		
L122	32 MHz Synthesizer	2W		
M101	Tiltmeter Interface	1W		
M102	Rack B Interface	2W	D53510A003	
M103	Utility Interface	2W		
P101	15V Power Supply	4W	D53305A001	
P102	15V Power Supply	3W	D53305A002	
P103	5V Power Supply	3W	D53305A003	
P104	28V Power Supply	3W	D53305A003	
P105	5V Power Supply	4W		
P111	Model 22 Power Supply	Special	D53200A007-1	
P112	Model 350 Power Supply	Special	D53200A007-2	

* Probably not required.

S101	F-R Control	2W	
S102	Apex Interface	2W	
S103	F-R Switching	4W	
S104	F-R Interface	1W	
S105	F-R Power Supply	4W	
T101	330 MHz Converter	2W	
T102	610 MHz Filter	2W	D53500A001
T103	1.5 GHz Converter	2W	D53500A002
T104	2.3 GHz Converter	2W	
T105	4.8 GHz Converter	2W	D53500A003
T106	8.4 GHz Converter	2W	D53500A010
T107	10.7 GHz Converter	2W	D53500A004
T108	15 GHz Converter	2W	D53500A005
T109	23 GHz Converter	2W	
T112	6.1 GHz Converter	2W	
T121	IF Distributor	2W	
T122	Baseband Converter	2W	