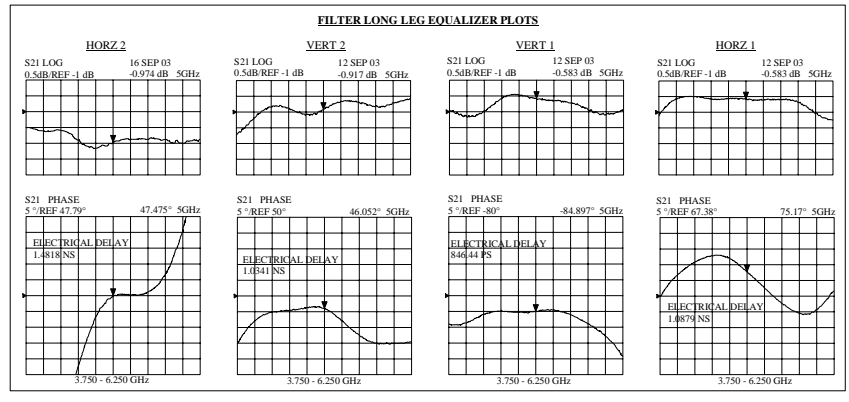
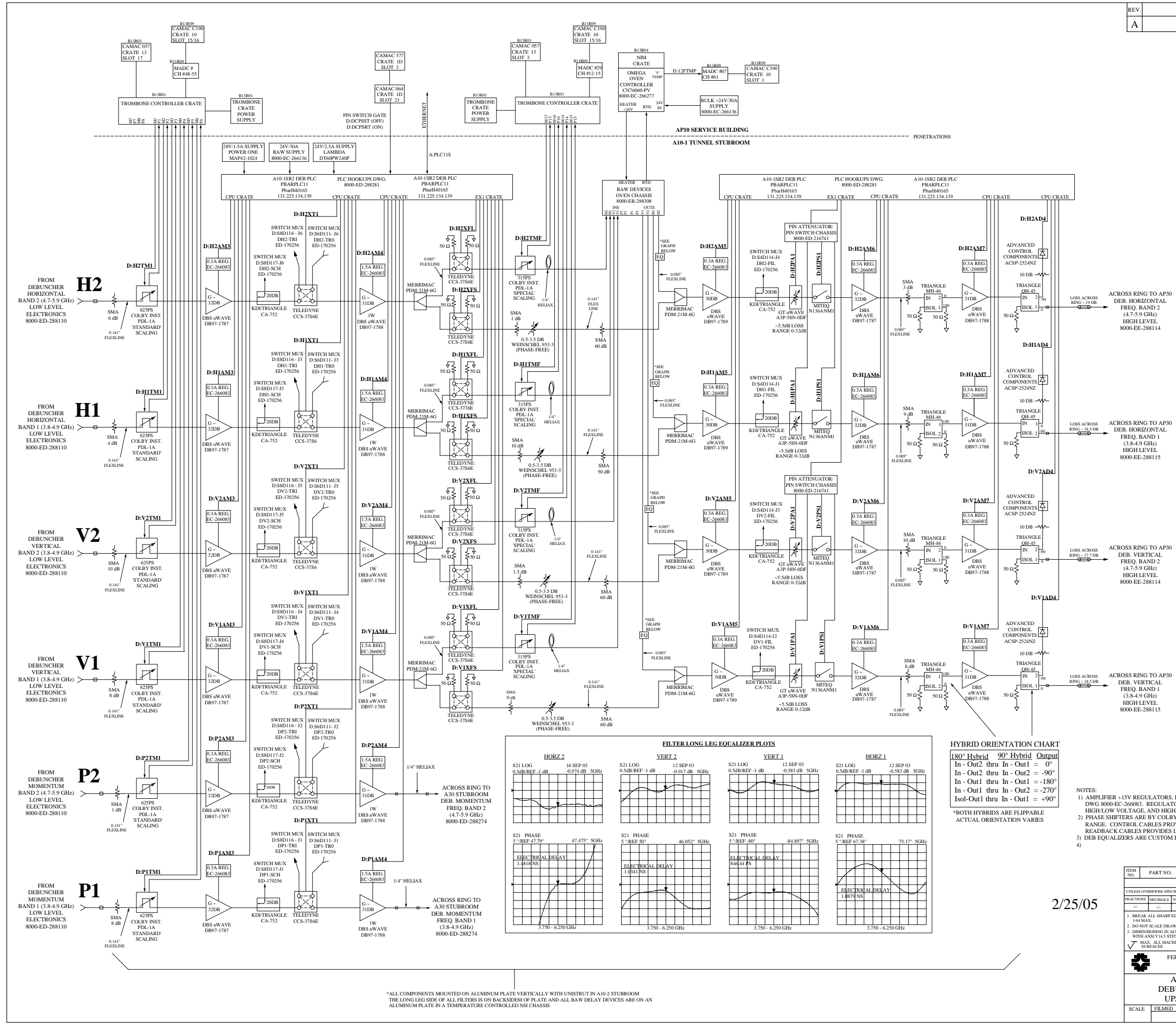


REV.	DESCRIPTION	DRAWN	DATE
A			



HYBRID ORIENTATION CHART

180° Hybrid 90° Hybrid Output

In - Out2 thru In - Out1 = 0°
 In - Out2 thru In - Out2 = -90°
 In - Out1 thru In - Out1 = -180°
 In - Out1 thru In - Out2 = -270°
 Isol-Out1 thru In = +90°

NOTES:
 1) AMPLIFIER +15V REGULATORS, FERMI-MADE, EITHER 300MA OR 1.5A. SEE DWG 8000-EC-266083. REGULATORS PROVIDE ON/OFF CONTROL STATUS, HIGH/LOW VOLTAGE, AND HIGH/LOW CURRENT STATUS.
 2) PHASE SHIFTERS ARE BY COLBY INSTRUMENTS, MODEL PDL-1A, 625PS RANGE. CONTROL CABLES PROVIDES MOTOR DIRECTIONAL POWER ON/OFF. REARBACK CABLES PROVIDES LOW/HIGH LIMIT AND POSITION.
 3) DEB EQUALIZERS ARE CUSTOM DESIGNED BY FERMI-LAB, LOSS -8 DB MAX.
 4)

2/25/05

*ALL COMPONENTS MOUNTED ON ALUMINUM PLATE VERTICALLY WITH UNISTRUT IN A10-2 STUBROOM. THE LONG LEG SIDE OF ALL FILTERS IS ON BACKSIDE OF PLATE AND ALL BAW DELAY DEVICES ARE ON AN ALUMINUM PLATE IN A TEMPERATURE CONTROLLED NSI CHASSIS

ITEM NO.	PART NO.	DESCRIPTION OR SIZE	QTY.
PARTS LIST			
UNLESS OTHERWISE SPECIFIED	ORIGINATOR	DRAWN	DATE
FRACCTIONS	DECIMALS	ANGLES	
✓	✓	✓	✓
1. BREAK ALL SHARP EDGES 1/64 MAX.	2. DO NOT SCALE DRAWING.	3. DIMENSIONS IN ACCORD WITH ANSI 14.5 STD'S	
✓	✓	✓	
MATERIAL:			
FERMI NATIONAL ACCELERATOR LABORATORY UNITED STATES DEPARTMENT OF ENERGY			
ANTI-PROTON SOURCE DEBUNCHER MEDIUM LEVEL UPSTREAM ELECTRONICS			
SCALE	FILMED	DRAWING NUMBER	REV.
		8000-EE-288112	