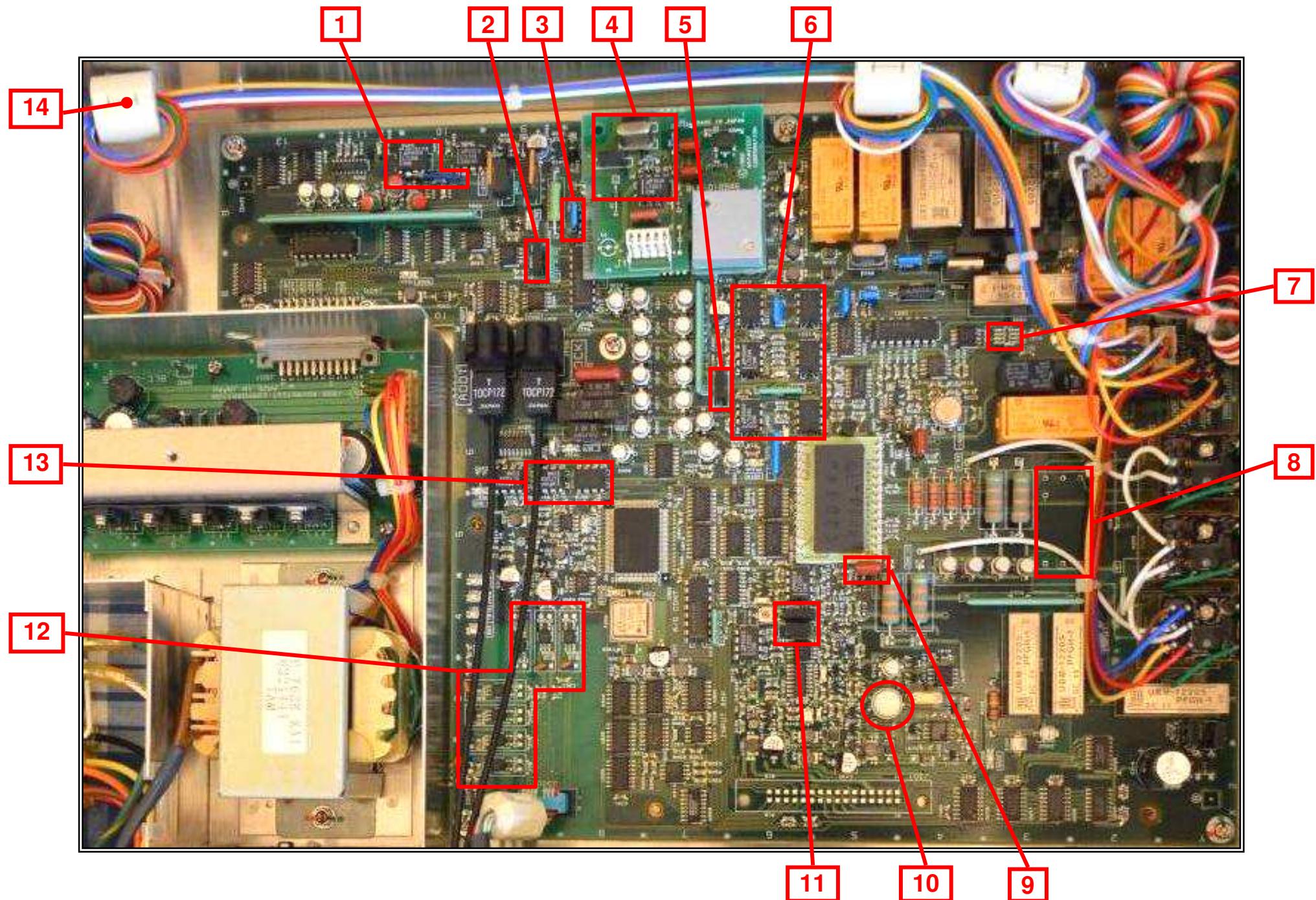


## *Evolution of Advantest/ADCMT (R)6581(D,T)*

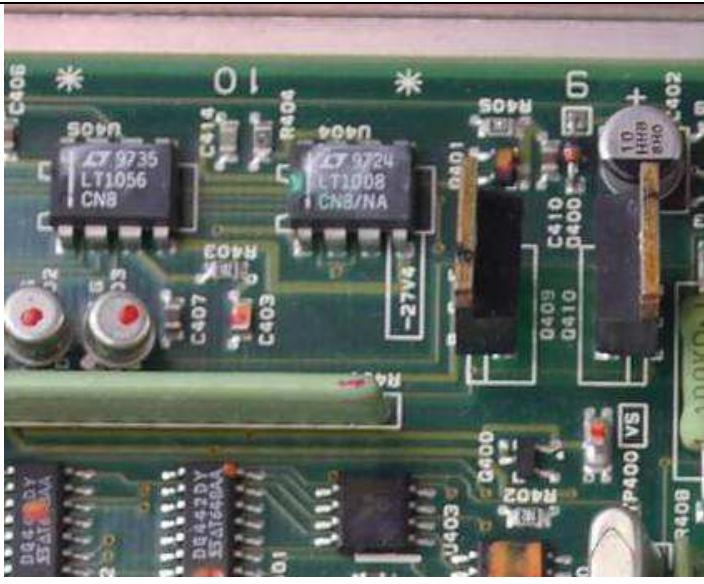


# 1 Ohms Current Source op amp

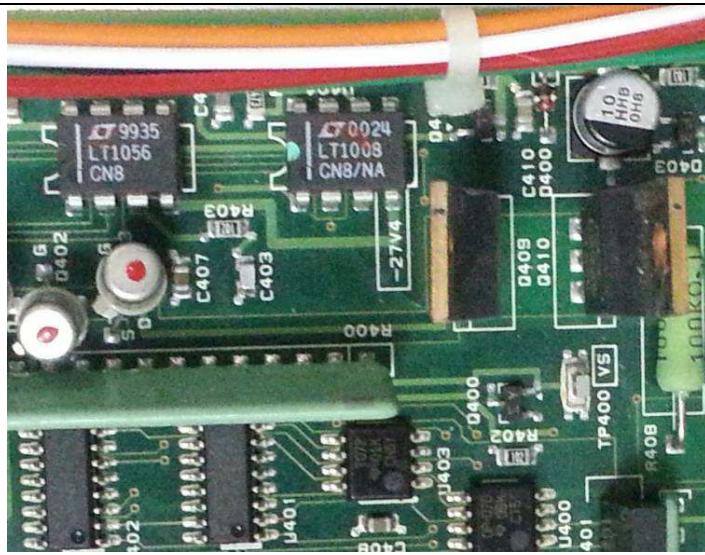
1995



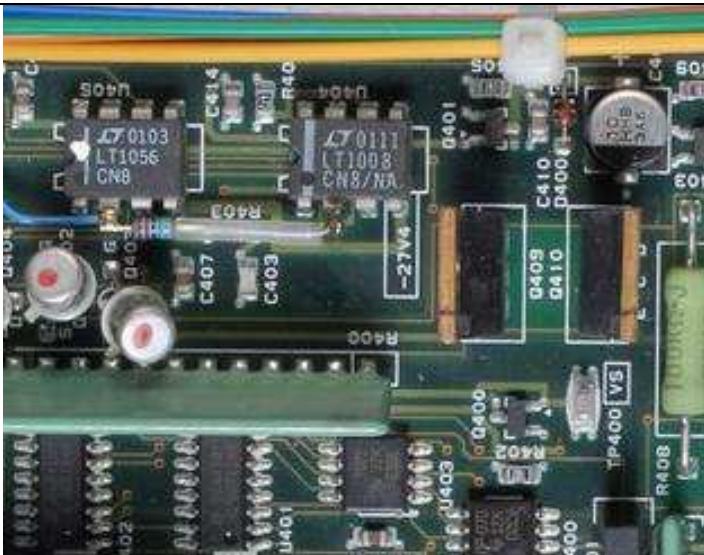
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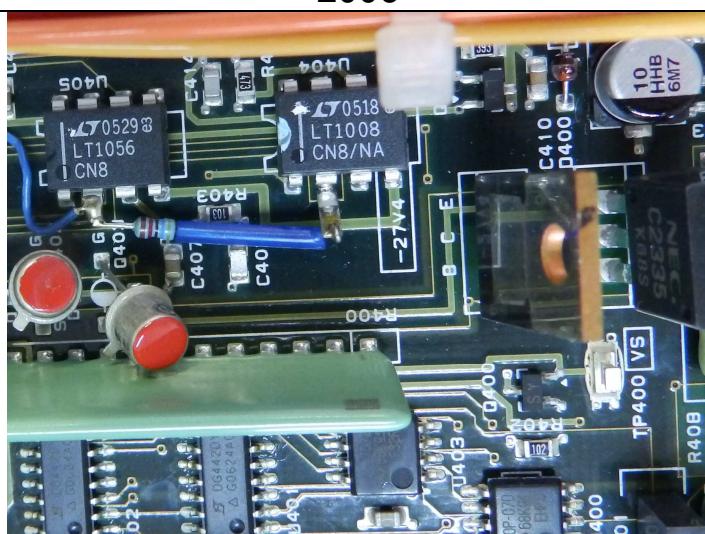
2000



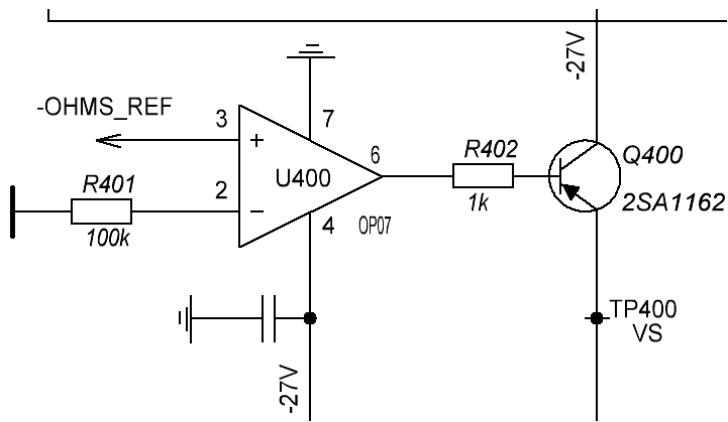
2003



2006

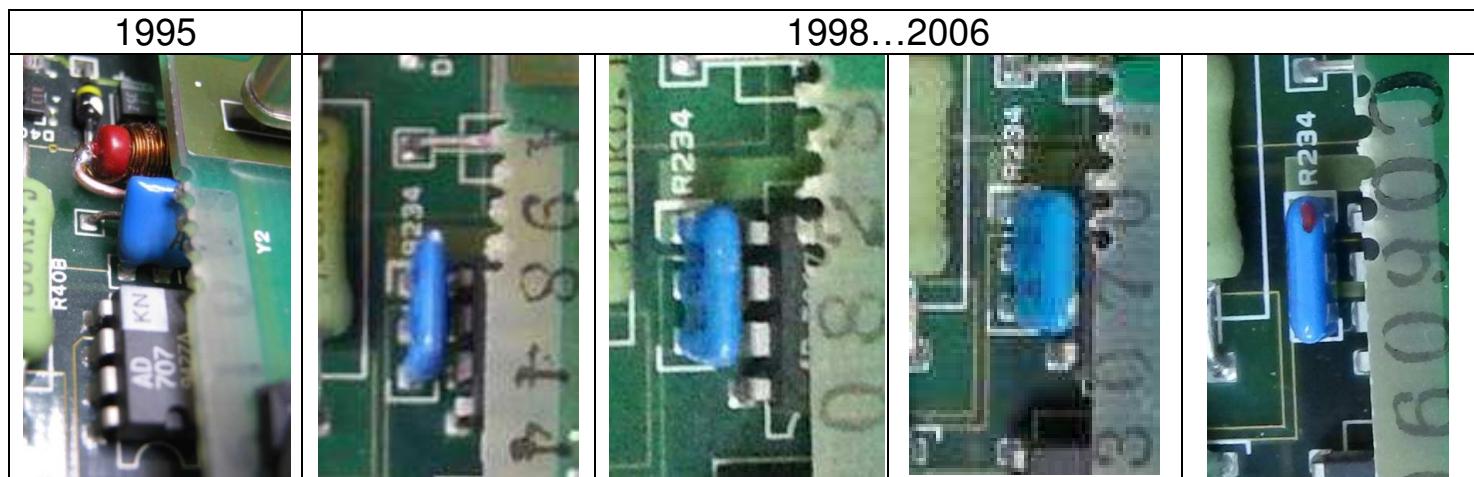
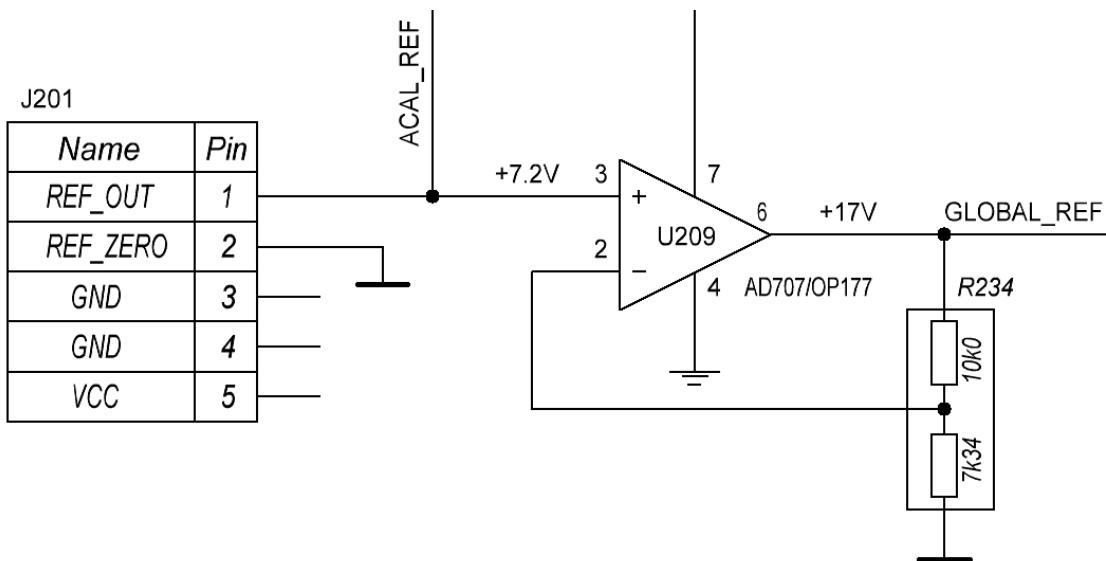


## 2 Ohms Current Source setting resistor R401 100k

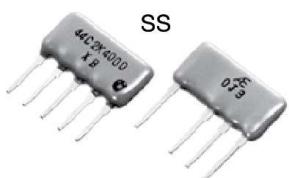


1995	1998	2000	2003	2006																
<b>Alpha Electronics</b>			<b>Alpha Electronics</b>																	
<b>HD</b> <table border="1"> <thead> <tr> <th>Type</th> <th>TCR (ppm/<math>^{\circ}</math>C) -55<math>^{\circ}</math>C to +125<math>^{\circ}</math>C*</th> <th>Resistance Range (<math>\Omega</math>)</th> </tr> </thead> <tbody> <tr> <td>HD</td> <td>0±2.5 (Y)</td> <td>30 to 120k</td> </tr> </tbody> </table> <p>Moisture Resistance <math>\pm 0.0025\%</math> Storage Life <math>\pm 0.0005\%</math> / 10,000 hrs. Thermal EMF 0.1 <math>\mu</math>V/<math>^{\circ}</math>C</p>			Type	TCR (ppm/ $^{\circ}$ C) -55 $^{\circ}$ C to +125 $^{\circ}$ C*	Resistance Range ( $\Omega$ )	HD	0±2.5 (Y)	30 to 120k	<b>MC</b> <table border="1"> <thead> <tr> <th>Type</th> <th>TCR (ppm/<math>^{\circ}</math>C) -55<math>^{\circ}</math>C to +125<math>^{\circ}</math>C*</th> <th>Resistance Range (<math>\Omega</math>)</th> <th>Resistance Tolerance (%)*†</th> <th>Rated Power (W) at 125<math>^{\circ}</math>C</th> </tr> </thead> <tbody> <tr> <td>MC</td> <td>0±2.5 (Y)</td> <td>30 to 200k</td> <td><math>\pm 0.005</math> (M) <math>\pm 0.01</math> (T) <math>\pm 0.02</math> (Q) <math>\pm 0.05</math> (A) <math>\pm 0.1</math> (B) <math>\pm 0.5</math> (D) <math>\pm 1</math> (F)</td> <td>0.3 (0.2 at 150 k<math>\Omega</math> or above)</td> </tr> </tbody> </table> <p>Moisture Resistance <math>\pm 0.01\%</math> Storage Life <math>\pm 0.0025\%</math> / 10,000 hrs. Thermal EMF 1.0 <math>\mu</math>V/<math>^{\circ}</math>C</p>		Type	TCR (ppm/ $^{\circ}$ C) -55 $^{\circ}$ C to +125 $^{\circ}$ C*	Resistance Range ( $\Omega$ )	Resistance Tolerance (%)*†	Rated Power (W) at 125 $^{\circ}$ C	MC	0±2.5 (Y)	30 to 200k	$\pm 0.005$ (M) $\pm 0.01$ (T) $\pm 0.02$ (Q) $\pm 0.05$ (A) $\pm 0.1$ (B) $\pm 0.5$ (D) $\pm 1$ (F)	0.3 (0.2 at 150 k $\Omega$ or above)
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MC	0±2.5 (Y)	30 to 200k	$\pm 0.005$ (M) $\pm 0.01$ (T) $\pm 0.02$ (Q) $\pm 0.05$ (A) $\pm 0.1$ (B) $\pm 0.5$ (D) $\pm 1$ (F)	0.3 (0.2 at 150 k $\Omega$ or above)																

### 3 Voltage Reference amplifier 7.2 → 17V

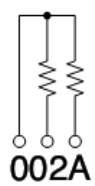


Alpha Electronics  
Precision Resistor Network (conformally coated)



**Circuit A  
(Array)**

Circuit Symbol



**TABLE 1. TEMPERATURE CHARACTERISTICS OF RESISTANCE**

TCR (ppm/°C) -25°C to +125°C

Absolute	Tracking	
	Resistance Ratio (R max./R min.)	TCR Tracking Available
0±5	1 ≤ R max./R min. ≤ 10	±1
	10 < R max./R min. ≤ 100	±2
	100 < R max./R min.	±3

## 4 Voltage Reference module

1995	1998
2000	2003
2006	<p>Alpha Electronics</p> <p>HD</p> <p>MC</p> <p>LT1013MH → LT1013CN8</p>