THAT Corporation

OutSmarts™ 1646 Balanced Line Driver IC Demonstration System

THAT 1646-DEMO

FEATURES

- Basic Line Driver Circuit
- Preassembled and Pretested
- Socket for THAT1646
- XLR Input/Output Connectors
- Generous Prototyping Area
- Complete Documentation Package
  - Schematic & Assembly Drawing

APPLICATIONS

- Verification of 1646 Performance
- Line Driver Evaluation
- Prototyping 1646 Applications
- PCB Layout Reference Design

Description

The THAT 1646-DEMO Demonstration System is a self-contained circuit board that simplifies evaluating the performance of a 1646 OutSmarts Line Driver IC. It features the 1646 connected in a basic output stage circuit. An external (±15V) power supply is required.

Completely assembled and tested, the 1646-DEMO comes with XLR connectors for signal input and output. A socket is provided for easy insertion of a 1646. To facilitate prototyping specific applications, spare circuit board area is perforated with plated-through holes. This makes the board particularly useful for experimentation.

With a 1646-DEMO and standard audio cables, an engineer can start testing the performance of basic 1646 circuitry and begin trying out additional circuit ideas in minutes.

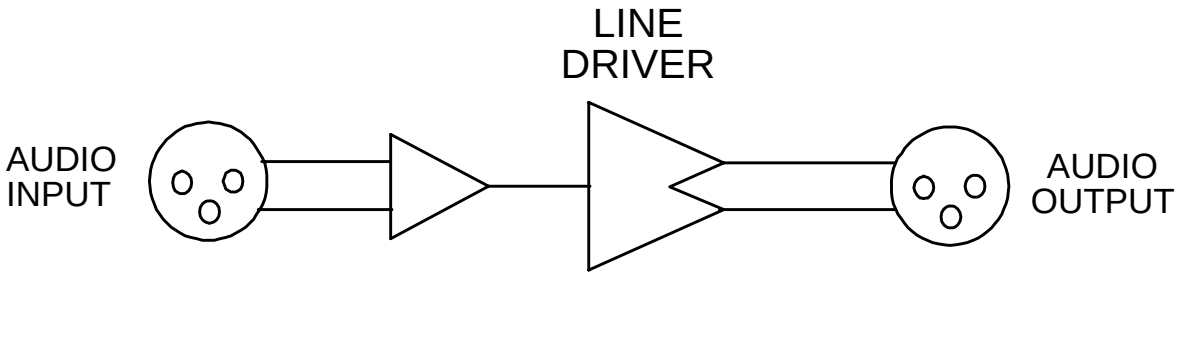

Figure 1. THAT 1646-DEMO block diagram

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SPECIFICATIONS[1]

Absolute Maximum Ratings

Positive Supply Voltage (V_{CC})	+20V	Operating Temperature Range (T_{OP})	0 to +70 ºC
Negative Supply Voltage (V_{EE})	-20V	Storage Temperature Range (T_{ST})	0 to +100 ºC

Electrical Characteristics[2]

Parameter	Symbol	Conditions	Min	Typ	Max	Units
Positive Supply Voltage	V_{CC}		+4	+15	+18	V
Negative Supply Voltage	V_{EE}		-4	-15	-18	V
Supply Current	I_S	±15 V Supply, no input signal	—	6.5	8.5	mA
Input Impedance, Audio	Z_{IN}	Differential	—	18	—	kΩ
Input Overload	$V_{IN\ (Max)}$	$V_{CC} = -V_{EE} = 15$ V	—	+21	—	dBu
Output Impedance	Z_{OUT}	Single-ended	40	50	60	Ω

1. All specifications subject to change without notice.
2. Unless otherwise noted, $T_A = 25$°C, $V_{CC} = +15$V, $V_{EE} = -15$V.

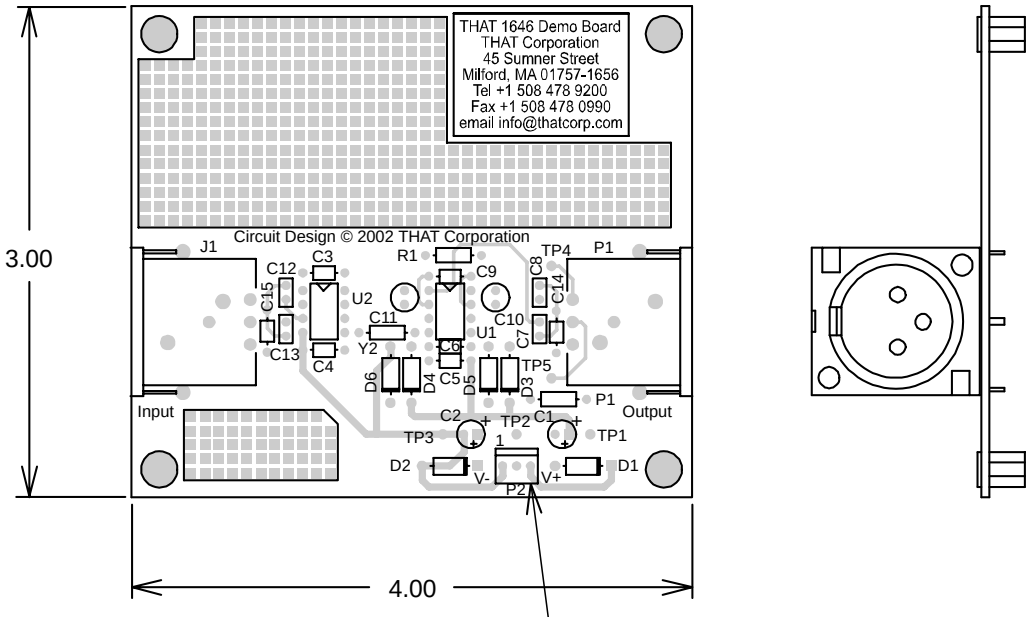

Figure 2. 1646-DEMO outline drawing

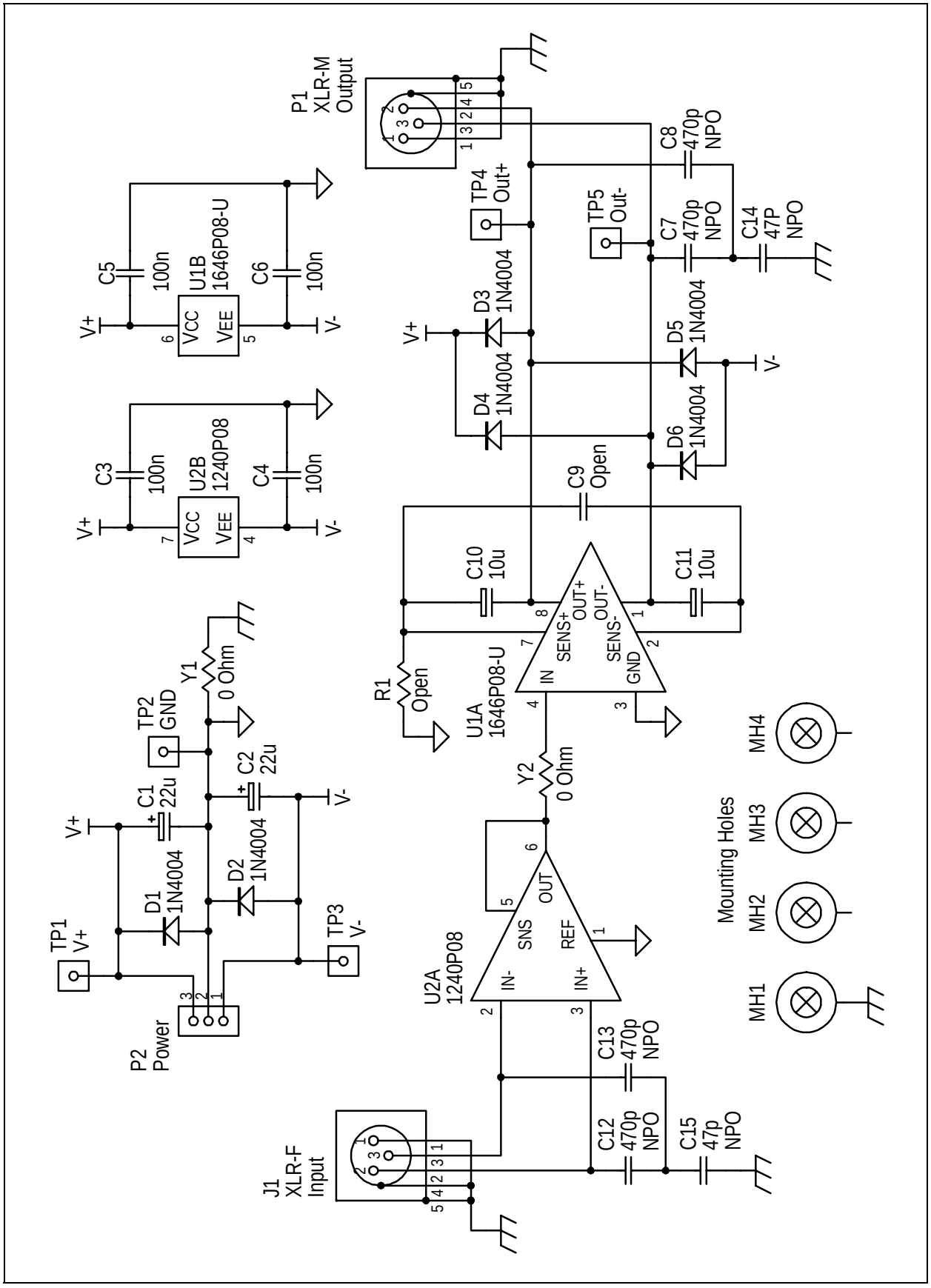

Figure 3. 1646-DEMO schematic

NOTES

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