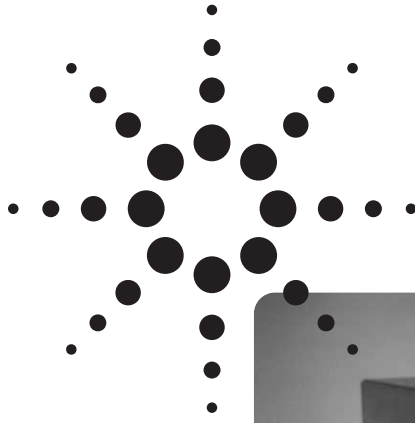


# Agilent 84940A Output Driver Card

Data Sheet



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- Output driver card for 70611A
- Capable of driving 31 electrical switches of attenuator sections
- Switch position sensing capability

The 84940A is a high current, constant voltage driver card designed to drive 31 electro-mechanical switch sections. The input to the 84940A is a 15 bit register (see figure 1) designed to accept CMOS TTL output signals from the 70611A Modular Measurement System (MMS) Attenuator/ Switch Driver and convert these input signals into low impedance current pulses capable of driving low impedance, inductive loads.

The incorporation of 84940A into an interface module comprised of electromechanical switches and/or attenuators provides the designer of automated, MMS test systems a simple way to control the interface module via the Modular System Interface Bus (MSIB). The 84940A can be hardwired to 31 individual switches by means of the output connectors provided with the 84940A (see figure 2). Control of the 84940A is realized through a 36 pin male connector located on the 84940A (see outline drawing).

A single 70611A Attenuator/ Switch Driver can drive up to eight 84940As. As a result, the MMS ATE designer can control up to a total of 248 switch sections remotely located from the 70611A driver. In addition to automated control of these switches, the 70611A provides the user with an extremely easy to use manual interface which consists of a user defined menu capable of defining all 248 switch states with the touch of a single button.

The 84940A has been specifically designed to drive 24 Vdc, two state/three terminal switches (See figure 3). The state of the connecting a control terminal to ground via one of the input lines. The 84940A will drive the 876X family of switches, the 849X family of attenuators and the 8490X family of attenuators. Most of these switches and attenuators have been designed to return state sensing information via the 70611A.

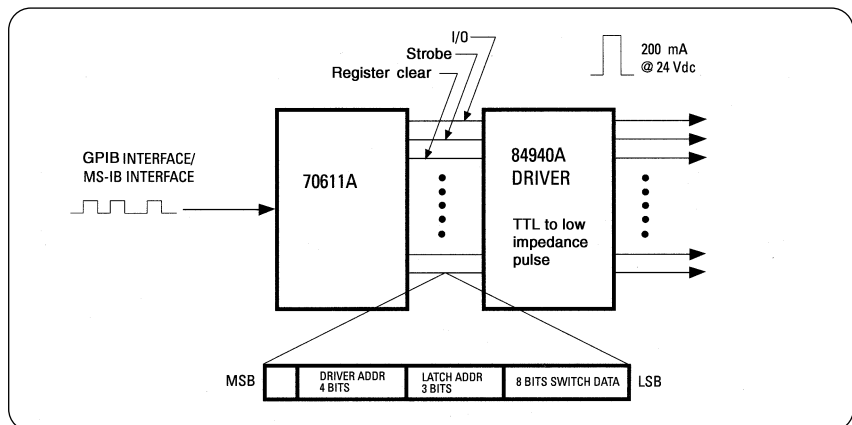


Figure 1. The 70611A will drive up to eight 84940As.

# 84940A Output driver card serial numbers US4016xxxx and above

Beginning with the above serial number, the 84940A Driver Card no longer has the board perforations for the break off tab section. The new boards are about 3.6 inches shorter but all mounting holes and connector locations are in the same relative positions as indicated below.

This version of the driver board incorporates higher current output driver stages that are internally protected against accidental shorts due to miswiring of switches.

Connectors J37–J47 are new 16 pin connectors that have been added to the board to enable direct connection of the Agilent Multiport switches.\* These connectors are in parallel with the (31) 4-pin connectors, (J1–J31), and may be used in place of the corresponding 4-pin connector. Channel assignments and switch types are marked on the board next to the connector. Use Agilent connector #1251-6864 (or equivalent) to terminate the ribbon cable from the multi-port switch.

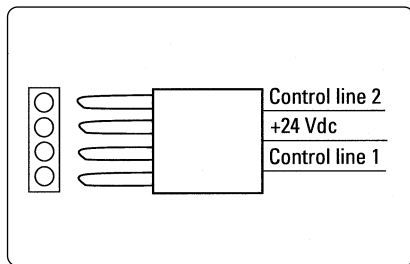
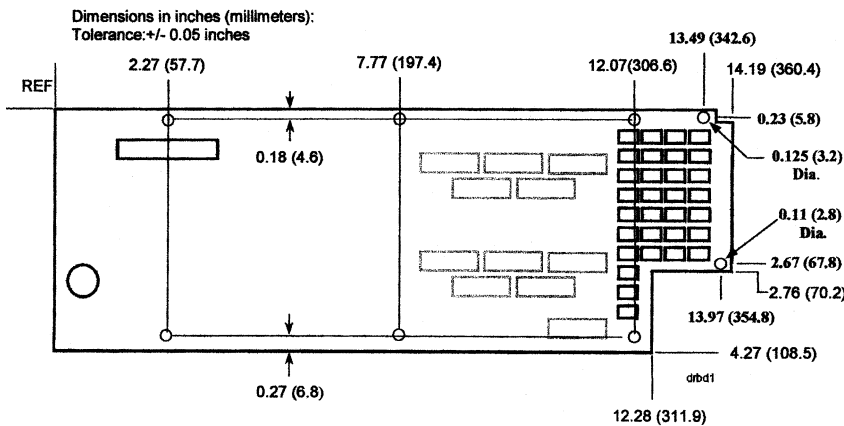


Figure 2. Device-driver interface plug

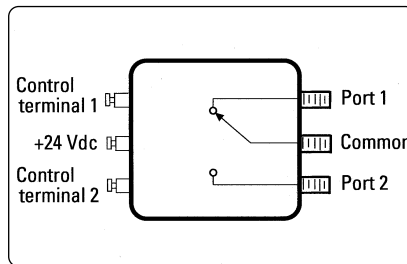


Figure 3. Three terminal SPDT switch

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\* Such as the 87104/6 A/B/C, 87406B and 87606B

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