

# AUDIO OUT



By Jake Rothman

## ICStripBoard – product review



Fig.1. Surface-mount adaptors are available from all the distributors, but are disproportionately expensive.

Every so often an idea comes along that's so obvious you kick yourself for not having thought of it first – ICStripBoard is one such idea. Terry Fitzpatrick invented copper stripboard at AV Roe engineering in 1959 for prototyping transistor circuits, avoiding the proverbial 'birds-nest' of wiring. This was commercialised by his boss Geoffrey Verdon-Roe to become the Veroboard we all know and use. Dr Daniel Brennan has now done the same for surface mount technology. Expensive SMT adaptor boards have been available for some time, but I feel ripped off using a £5.00 board to connect a 26p class-D amplifier chip (Fig.1). As with overpriced software, it takes an innovative individual to come up with the right countermeasure.

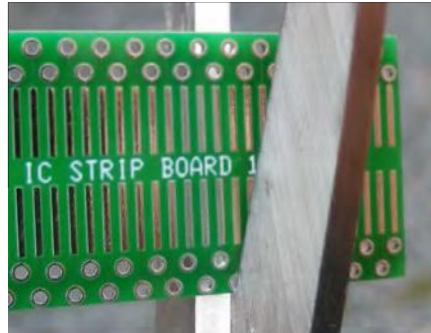


Fig.3. The boards can easily be cut to size with scissors – no hacksaw needed.

All surface-mount devices come in a few standard pad pitches and there is an ICStripBoard available for each one, as shown in Fig.2. The epoxy fibreglass board is 0.8mm thick, so it can easily be cut to size with scissors (Fig.3). Each board is 100mm long, sufficient for around a dozen components. At £3.99 a board this is over ten-times more cost effective than other systems. At this price it is also ideal for use as an SMT soldering training board. Although the samples I have had are in standard tinned industrial green, the new ones will be colour-coded and gold plated. Each pad is brought out to a plated-through hole to which tinned copper wire can be soldered. The assembly can then be used for



Fig.4. SMT dual-JFET mounted on board; it costs 30-times less than a metal-can version.

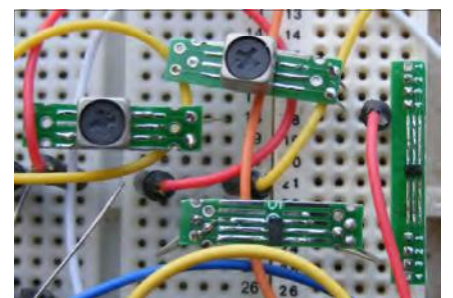


Fig.5. ICStripBoard is very useful for incorporating SMT components in conventional prototyping, such as breadboards.

breadboarding or soldering to conventional circuit boards.

There are many components that are either only available in SMT packages or through-hole versions that are very expensive. One problem I've had is with the dual JFETs used in low-noise preamplifiers. The Toshiba 2SK2145 costs about 56p, whereas an equivalent TO18 device from interFET costs almost £16.00 from Mouser. Fig.4 shows the 2SK2145 mounted on the 0.95mm board. My only criticism is that the gaps down the centre between the pads is slightly too wide for most SMT discrete transistors.

I have made a full collection of ICStripBoard-connected devices for prototyping and design work. Fig.5 shows some examples using a breadboard prototype and TDK adjustable SMT coils.

As well as individual boards, a prototype pack that contains one of each board and a foot of Solder Wick is sold for £11.99 (academic and quantity discounts also available). For further details just contact: [sales@icstripboard.co.uk](mailto:sales@icstripboard.co.uk)

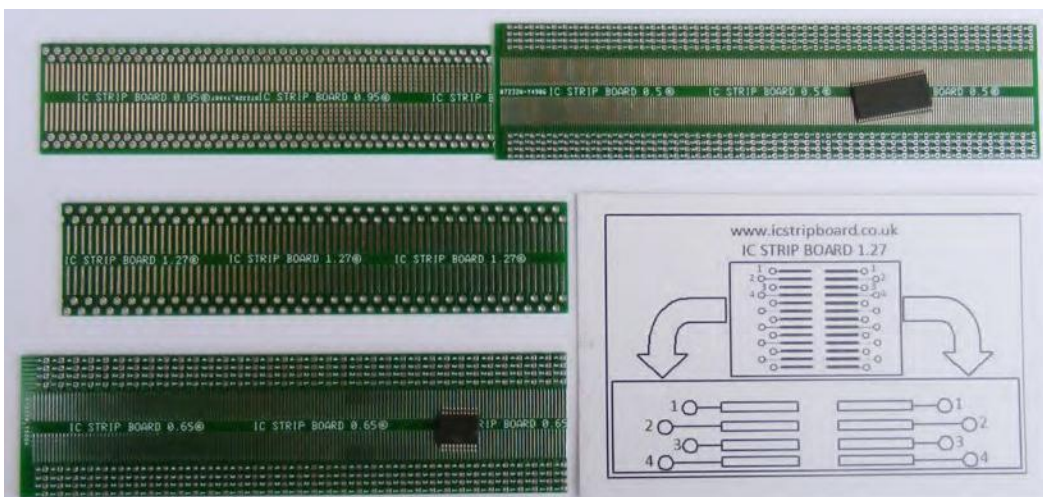


Fig.2. ICStripBoard is available in the four common surface-mount pitch standards.