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XR-2206/2211/2212

Evaluation System User Manual

Rev. 1.00

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GENERAL DESCRIPTION

This demo board is a blank printed circuit card that simplifies design, breadboarding, and test of circuits using the XR-2206, XR-2211, or the XR-2212. The 5.0 by 4.75 inch board can be used to build practically all of the databook application circuits that are given for these devices. With the exception of common power feed, each chip and its associated passive components are independent circuit blocks on the demo board. Therefore, it can be assembled with any one or more of the chips according to the user's needs.

BOARD SCHEMATIC DIAGRAM

The schematic diagram contains separate sections for the XR-2206, XR-2211, and the XR-2212. Circuit design for a specific application requires using these diagrams while referring to the appropriate circuits and equations that are given for each device in the EXAR databook. A breadboard section with isolated power and ground busses is also provided for additional analog or digital circuitry that may be required.

The purpose of this schematic is to show the circuit capabilities for each integrated circuit. Although the component values shown are reasonable and each of the three devices will function properly with them, they are provided for illustration only, and are not chosen for any specific application. Also, all the parts that are shown may not be required for a particular circuit since the schematic shows everything that the board can accommodate.

COMPONENT CONSIDERATIONS

The component marking, which is 1:1 scale, gives individuals who do not have an actual demo board an approximate idea of component sizes.

Power, input, and output connections are made at pads that are located close to the associated IC pin or component. Holes for five banana jacks or binding posts are located at the rear of the board. Two of these should be used for power and ground, and the remaining three can be wired to the I/O pads as needed.

The style of electrical components that the board uses should be readily available. The potentiometers are the inexpensive vertical-mount PC board type. Resistors are 1/4 watt and the bypass capacitors can be 0.1µF monolithic ceramic type with radial leads spaced 0.1 inch. The electrolytic capacitors are also vertical mount units with 0.1 inch lead spacing. The board area provided for the various timing capacitors should be sufficient for small mica, polystyrene, or mylar units.

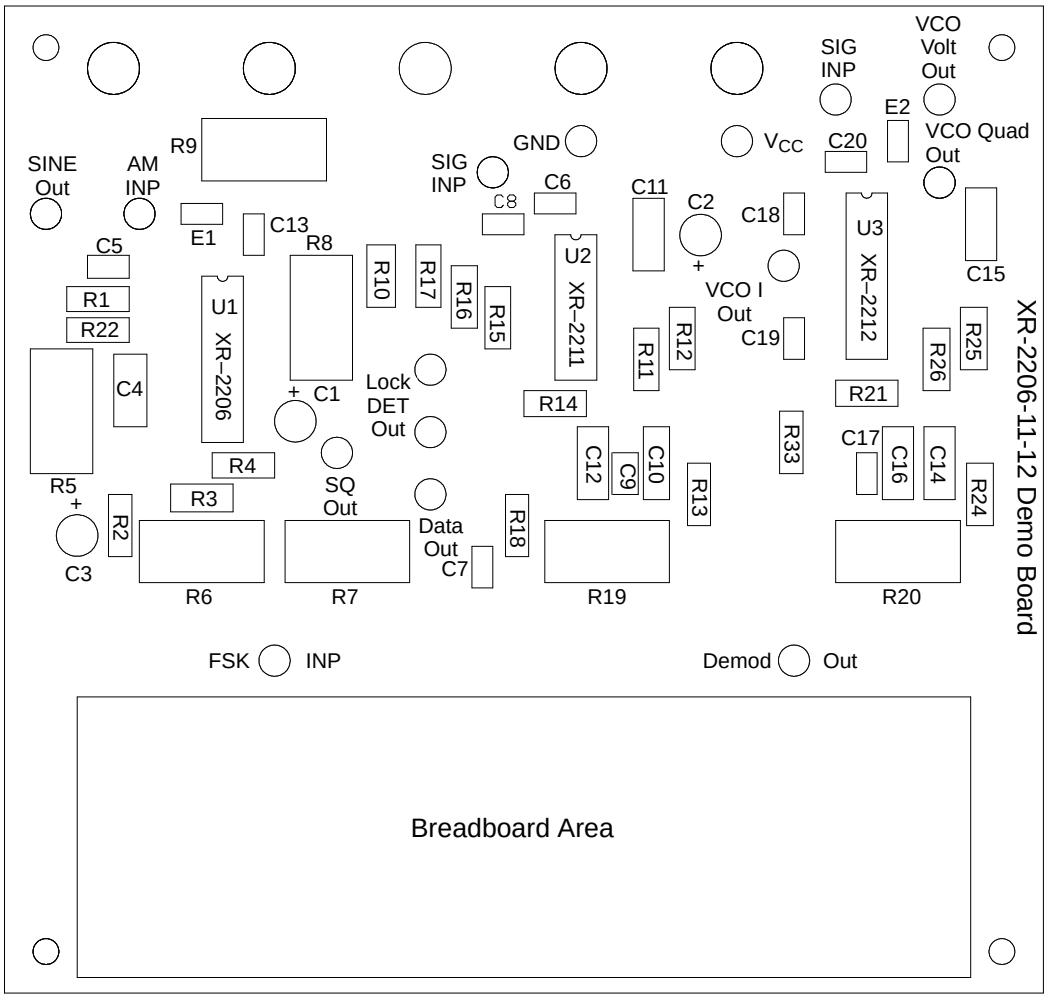


Figure 1. Demo Board Component Layout

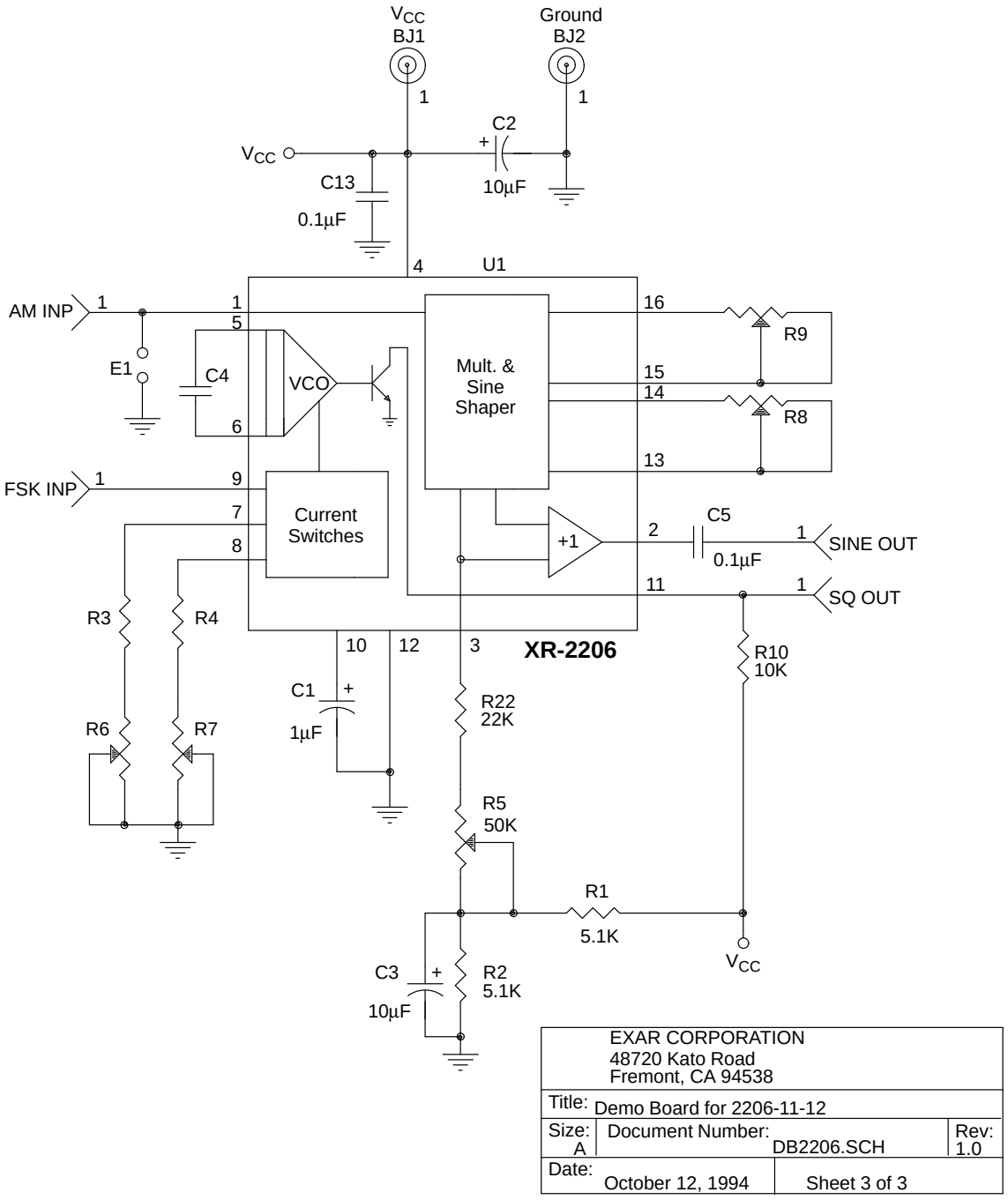


Figure 2. XR-2206 Demo Board

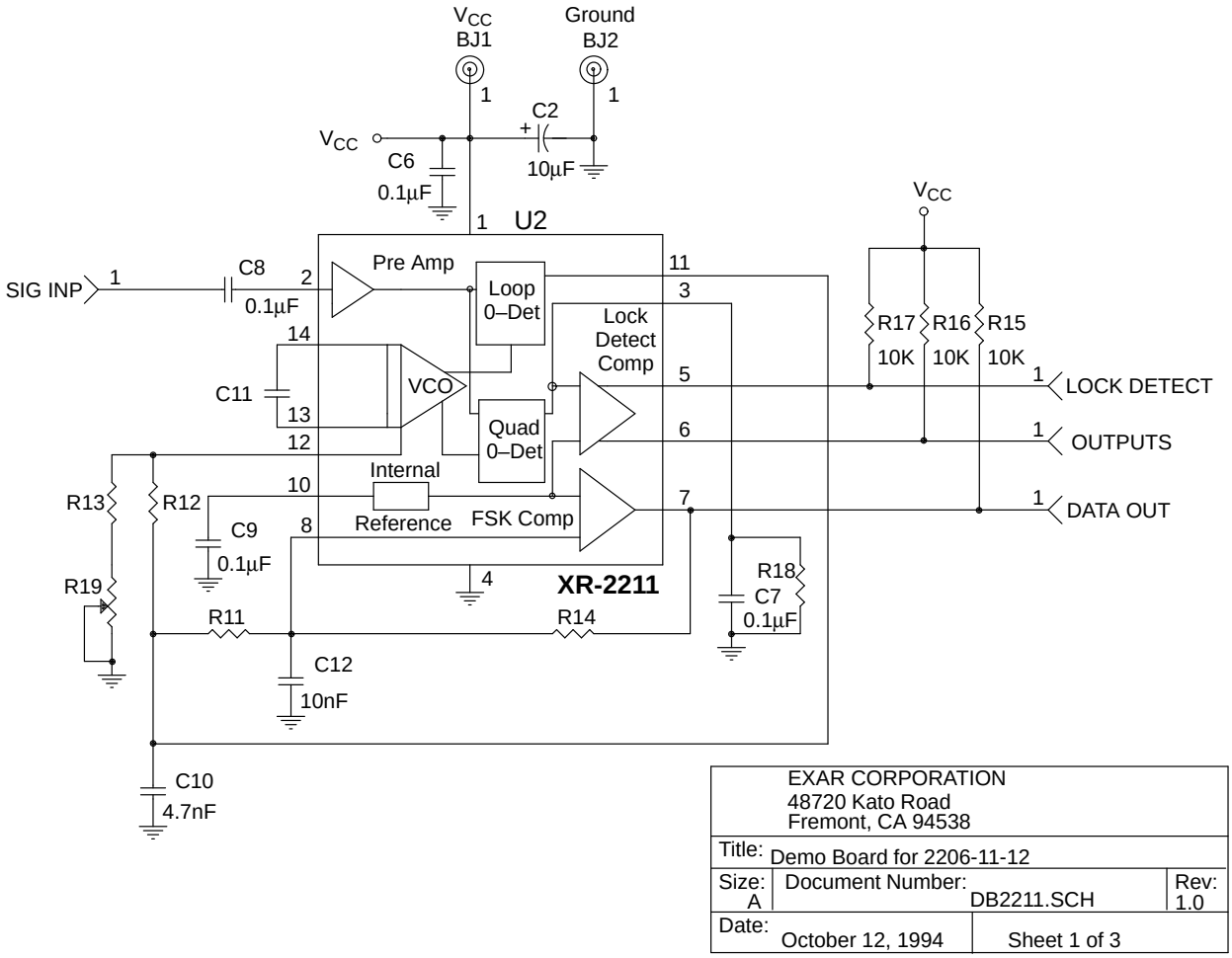


Figure 3. XR-2211 Demo Board

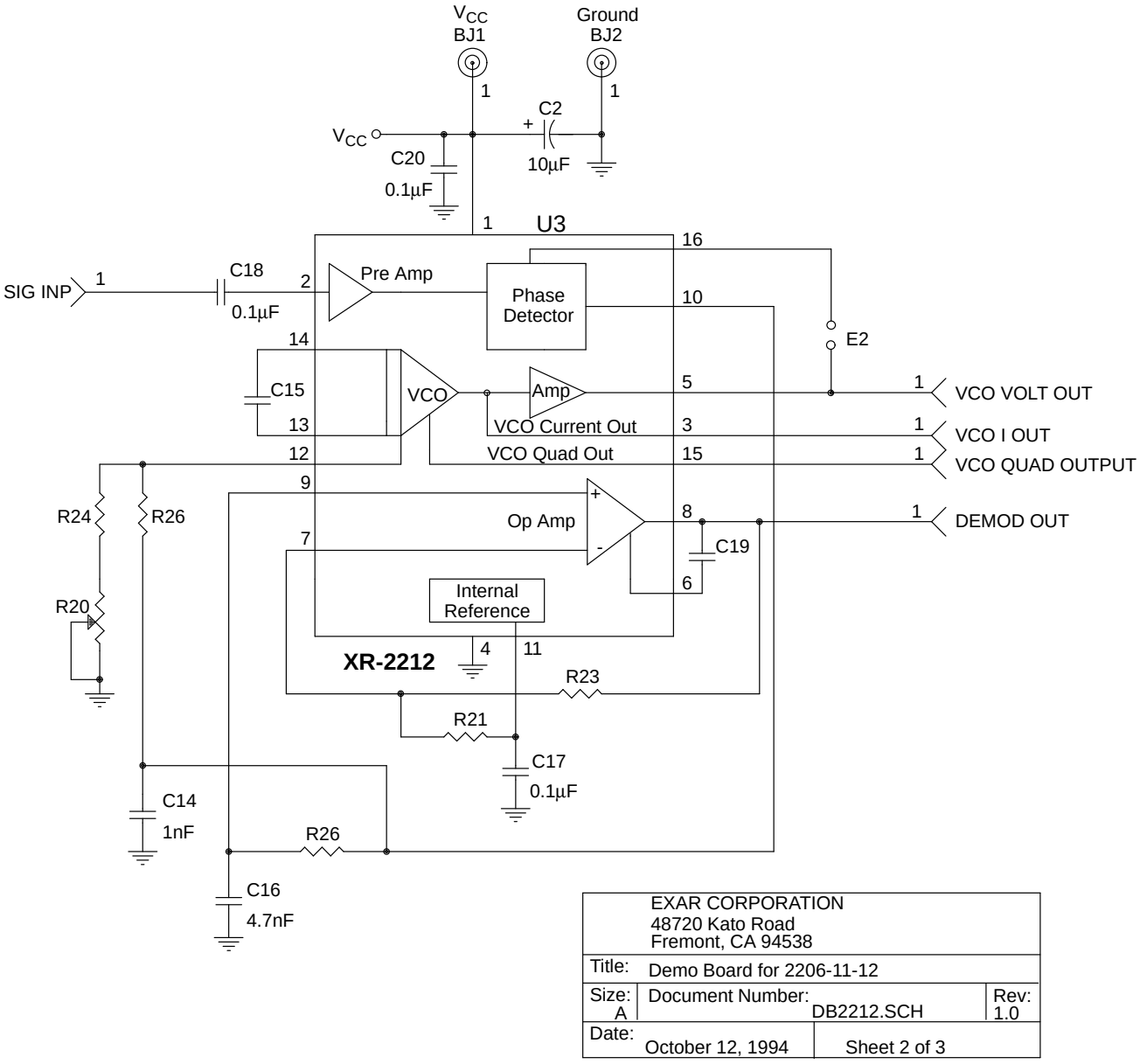


Figure 4. XR-2212 Demo Board

Notes

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