

### Important information when using your 1583 QFN/DIP adaptor board

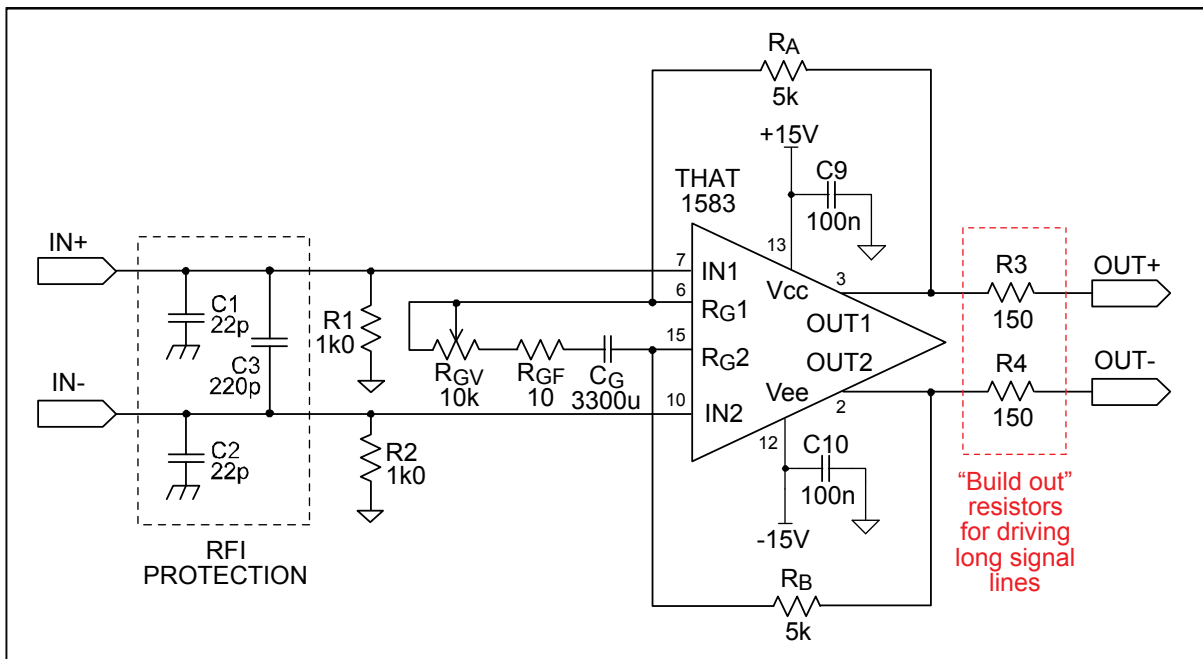
Please be aware that the 1583 has a **Maximum Capacitive Load** specification of 30 pF. Exceeding this limit may result in unstable operation, particularly when operating the device at elevated temperatures. Long test cables and/or long PCB traces can often exceed this 30 pF limit and we recommend the use of a pair of 150 Ohm "build-out" resistors when making bench measurements, or in any situation that requires driving long signal lines. The 150 Ohm resistors between the 1583 outputs and the test equipment, etc. will keep the 1583 outputs stable and the measurements accurate.

As a point of reference, PCB traces over ground plane (on a typical 2 layer FR-4 board) will have a capacitance of about 2 pF per inch, while typical twisted/shielded cable has about 30 pF per foot. Also, bench test equipment can have inputs that often exceed 100 pF.

We also recommend locating the power supply de-coupling capacitors as close to the DIP adaptor pins as possible.

Happy experimenting!

THAT Corporation



THAT 1583 Basic Application Circuit with compensation for long output signal connection.