

Connecting the DCP01B in Series

Multiple DCP01B isolated 1W DC/DC converters can be connected in series to provide nonstandard voltage rails. This is possible by using the floating outputs provided by the DCP01B galvanic isolation.

Connect the positive V_{OUT} from one DCP01B to the negative V_{OUT} (0V) of another, as shown in Figure 1. If the $SYNC_{IN}$ pins are tied together, the self-synchronization feature of the DCP01B will prevent beat frequencies on the voltage rails. The $SYNC_{IN}$ feature of the DCP01B allows easy connection in series, which reduces separate filtering components.

The outputs on dual output DCP01B versions can also be connected in series to provide two times the magnitude of V_{OUT} , as shown in Figure 2. For example, a dual 15V DCP01B could be connected to provide a 30V rail.

Connecting the DCP01B in Parallel

If the output power from one DCP01B is not sufficient, it is possible to parallel the outputs of multiple DCP01B converters (see Figure 3). Again, the $SYNC_{IN}$ feature allows easy synchronization to prevent power-rail beat frequencies at no additional filtering cost.

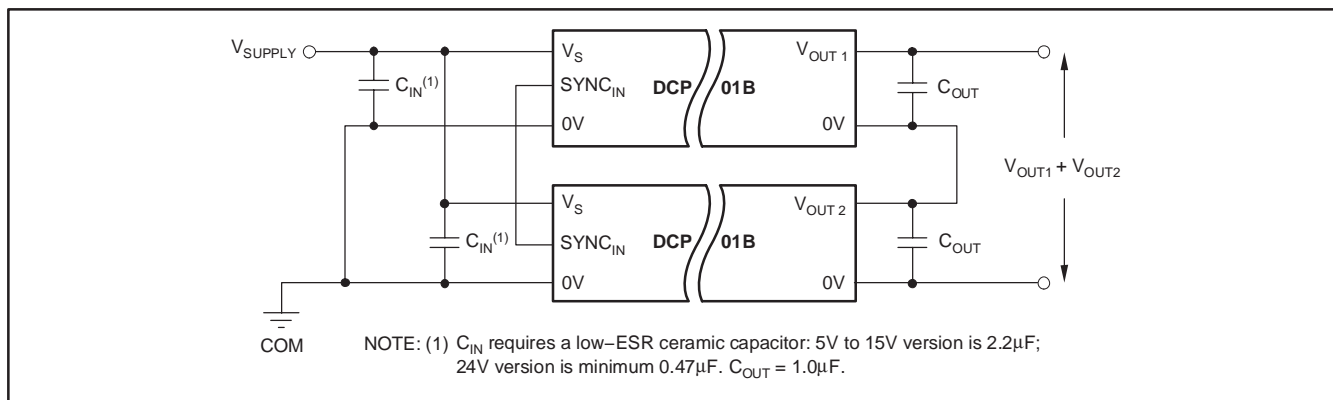


Figure 1. Connecting the DCP01B in Series

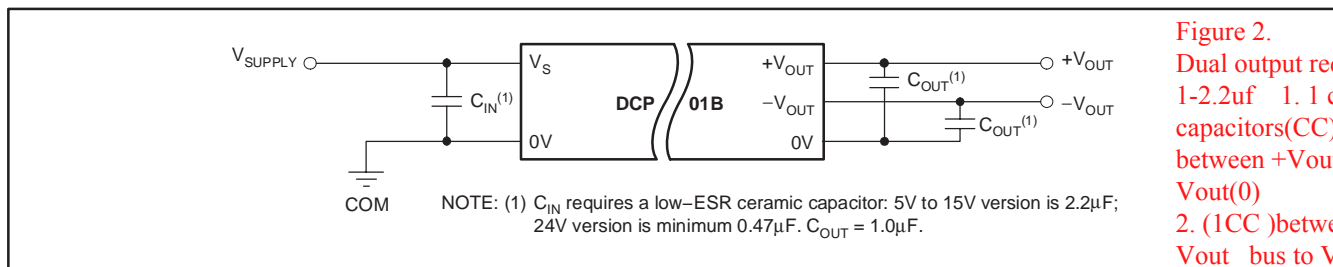


Figure 2. Dual output requires a 1-2.2 μ F 1.1 ceramic capacitors(CC) between +Vout and Vout(0) 2. (1CC) between (-) Vout bus to Vout (0) common .

Figure 2. Connecting Dual Outputs in Series

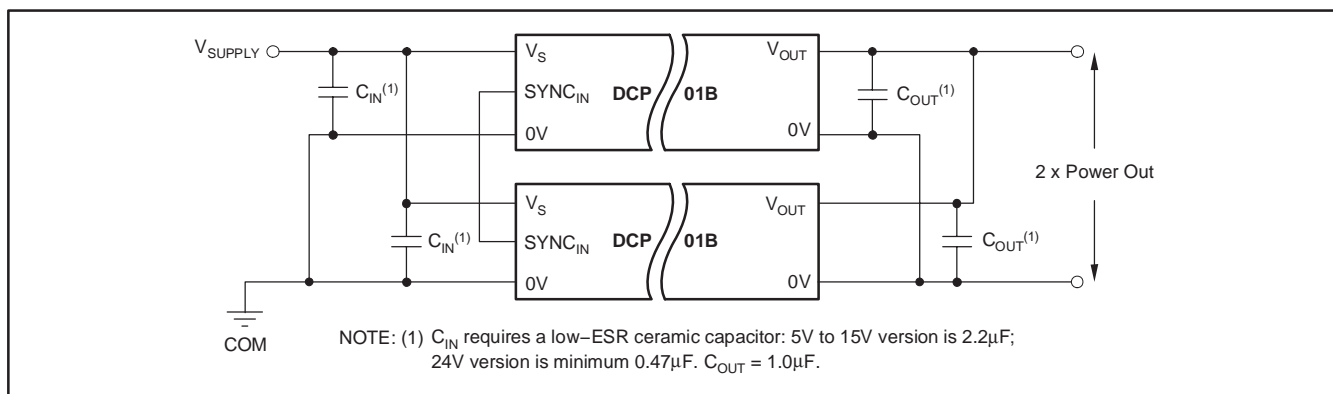


Figure 3. Connecting Multiple DCP01Bs in Parallel