

designers and researchers, the needed stimulus to carry out further work on newer possibilities in improving the design of the CFOA and in searching newer applications of the CFOAs. For further studies, an additional list of references has been provided at the end.

It is interesting to note that the existing literature on CFOAs and their applications spread over dozens of international journals resulting in the publication of several hundred research papers on CFOAs have curiously focused their attention quite dominantly only on one specific type of CFOA namely, the AD844, which is uniquely different from the variety of other CFOAs from various manufacturers in that, this happens to be the only CFOA which has its Z-pin accessible outside the chip. As a consequence of this, researchers and academicians have found this CFOA to be particularly flexible and versatile because it (1) can be used as an op-amp, (2) can be used to realize current conveyor based circuits, (3) can be used to realize circuits based upon many other building blocks of more recent origin and at the same time, (4) can also be used as a 4-terminal building block in its own right.

In view of the wide spread use and applications of the CFOA with an external accessible Z-pin, it is, therefore, extremely surprising that none of the manufacturers have turned their attention to produce any more CFOAs of this kind and have limited themselves without exception, to only three terminal CFOAs which can be used only as a replacement of the traditional VOAs with the only advantage of offering superior performance in the same topologies (as compared to their VOA-based counterparts).

In view of the forgoing, the authors strongly feel that to tap the full potential of CFOAs with external accessible Z-terminal, the leading ICs manufacturers should produce improved versions of bipolar/CMOS/BiCMOS CFOAs and should necessarily provide one or more (if two, then complimentary) current-mode outputs and as many buffered voltage-mode outputs which will definitely make such a building block much more capable, flexible and versatile for various analog signal processing and signal generation applications in both linear and non-linear modes.