Abstracts

Acoustic Charge Transport Digitally Programmable Transversal Filter Development

R.W. Miller and R.J. Kansy. "Acoustic Charge Transport Digitally Programmable Transversal Filter Development." 1990 MTT-S International Microwave Symposium Digest 90.3 (1990 Vol. III [MWSYM]): 1111-1114.

A monolithic 128-tap digitally programmable analog transversal filter is described that uses an acoustic charge transport tapped delay line and integrated GaAs MESFET circuits for coefficient storage and tap weighting. The device has 5-bit tap weights, an input sampling rate of 360 MHz, and an output tap spacing corresponding to an output sampling rate of 180 MHz. The device is mounted on a ceramic thick film substrate along with RF input and output amplifiers and the entire assembly is housed in a 1.25 inch-square 44-pin kovar flatpack.

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