

2.8 Integrators and Differentiators

Reading Assignment: 105-113

Op-amp circuits can also (and often do) implement reactive elements such as inductors and capacitors.

HO: OP-AMP CIRCUITS WITH REACTIVE ELEMENTS

One important op-amp circuit is the inverting differentiator.

HO: THE INVERTING DIFFERENTIATOR

Likewise the inverting integrator.

HO: THE INVERTING INTEGRATOR

HO: AN APPLICATION OF THE INVERTING INTEGRATOR

Let's do some examples of op-amp circuit analysis with reactive elements.

EXAMPLE: A NON-INVERTING NETWORK

EXAMPLE: AN INVERTING NETWORK

EXAMPLE: ANOTHER INVERTING NETWORK

EXAMPLE: A COMPLEX PROCESSING CIRCUIT