

## **Table of Contents - Op Amp Applications Handbook, 1st Edition**

Foreword

Preface

Acknowledgments

Op Amp History Highlights

Chapter 1: Op Amp Basics

Section 1-1: Introduction

Section 1-2: Op Amp Topologies

Section 1-3: Op Amp Structures

Section 1-4: Op Amp Specifications

Section 1-5: Precision Op Amps

Section 1-6: High Speed Op Amps

Chapter 2: Specialty Amplifiers

Section 2-1: Instrumentation Amplifiers

Section 2-2: Programmable Gain Amplifiers

Section 2-3: Isolation Amplifiers

Chapter 3: Using Op Amps with Data Converters

Section 3-1: Introduction

Section 3-2: ADC/DAC Specifications

Section 3-3: Driving ADC Inputs

Section 3-4: Driving ADC/DAC Reference Inputs

Section 3-5: Buffering DAC Outputs

Chapter 4: Sensor Signal Conditioning

Section 4-1: Introduction

Section 4-2: Bridge Circuits

Section 4-3: Strain, Force, Pressure and Flow  
Measurements

Section 4-4: High Impedance Sensors

Section 4-5: Temperature Sensors

Chapter 5: Analog Filters

Section 5-1: Introduction

Section 5-2: The Transfer Function

Section 5-3: Time Domain Response

Section 5-4: Standard Responses

Section 5-5: Frequency Transformations

Section 5-6: Filter Realizations

Section 5-7: Practical Problems in Filter  
Implementation

## Section 5-8: Design Examples

### Chapter 6: Signal Amplifiers

#### Section 6-1: Audio Amplifiers

#### Section 6-2: Buffer Amplifiers and Driving Capacitive Loads

#### Section 6-3: Video Amplifiers

#### Section 6-4: Communication Amplifiers

#### Section 6-5: Amplifier Ideas

#### Section 6-6: Composite Amplifiers

### Chapter 7: Hardware and Housekeeping Techniques

#### Section 7-1: Passive Components

#### Section 7-2: PCB Design Issues

#### Section 7-3: Op Amp Power Supply Systems

#### Section 7-4: Op Amp Protection

#### Section 7-5: Thermal Considerations

#### Section 7-6: EMI/RFI Considerations

#### Section 7-7: Simulation, Breadboarding and Prototyping

### Chapter 8: Op Amp History

#### Section 8-1: Introduction

#### Section 8-2: Vacuum Tube Op Amps

#### Section 8-3: Solid-State Modular and Hybrid Op Amps

#### Section 8-4: IC Op Amps

## Index