

750MHz, Low Distortion Unity Gain, Closed Loop Buffer

November 1996

Features

- **Wide -3dB Bandwidth** 750MHz
- **Very Fast Slew Rate** 1300V/ μ s
- **Fast Settling Time (0.2%)** 7ns
- **High Output Current** 60mA
- **Fixed Gain of +1**
- **Gain Flatness (100MHz)** 0.03dB
- **Differential Phase** 0.025 Degrees
- **Differential Gain** 0.04%
- **3rd Harmonic Distortion (50MHz)** -80dBc
- **3rd Order Intercept (100MHz)** 30dBm

Applications

- Video Switching and Routing
- RF/IF Processors
- Driving Flash A/D Converters
- High-Speed Communications
- Impedance Transformation
- Line Driving
- Radar Systems

Description

The HFA1110 is a unity gain closed loop buffer that achieves -3dB bandwidth of 750MHz, while offering excellent video performance and low distortion. Manufactured on Harris' proprietary complementary bipolar UHF-1 process, the HFA1110 also offers very fast slew rate, and high output current. It is one more example of Harris' intent to enhance its leadership position in products for high speed signal processing applications.

The HFA1110's settling time of 11ns to 0.1%, low distortion and ability to drive capacitive loads make it an ideal flash A/D driver.

The HFA1110 is an enhanced, pin compatible upgrade for the AD9620, AD9630, CLC110, EL2072, BUF600 and BUF601.

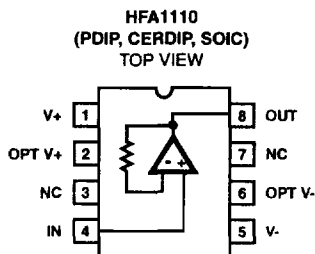
For buffer applications requiring a standard op amp pinout, or selectable gain (-1, +1, +2), see the HFA1112 data sheet. For output limiting see the HFA1113 datasheet.

For military grade product please refer to the HFA1110/883 data sheet.

Ordering Information

PART NUMBER (BRAND)	TEMP. RANGE ($^{\circ}$ C)	PACKAGE	PKG. NO.
HFA1110IJ	-40 to 85	8 Ld CERDIP	F8.3A
HFA1110IP	-40 to 85	8 Ld PDIP	E8.3
HFA1110IB (H1110I)	-40 to 85	8 Ld SOIC	M8.15
HFA1110EVAL	High Speed Buffer DIP Evaluation Board		

Pinout



Pin Descriptions

NAME	PIN NUMBER	DESCRIPTION
V+	1	Positive Supply
Opt V+	2	Optional Positive Supply
NC	3	No Connection
IN	4	Input
V-	5	Negative Supply
Opt V-	6	Optional Negative Supply
NC	7	No Connection
OUT	8	Output