urr-Brown Products
from Texas Instruments

VSP3200
VSP3210



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CCD SIGNAL PROCESSOR FOR SCANNER APPLICATIONS

FEATURES

- **INTEGRATED TRIPLE-CORRELATED DOUBLE SAMPLER**
- **OPERATION MODE SELECTABLE: 1-Channel, 3-Channel CCD Mode, 8Msps**
- **PROGRAMMABLE GAIN AMPLIFIER: 0dB to +13dB**
- **SELECTABLE OUTPUT MODES: Normal/Demultiplexed**
- **OFFSET CONTROL RANGE: ±500mV**
- **+3V, +5V Digital Output**
- **LOW POWER: 300mW (typ)**
- **LQFP-48 SURFACE-MOUNT PACKAGE**

DESCRIPTION

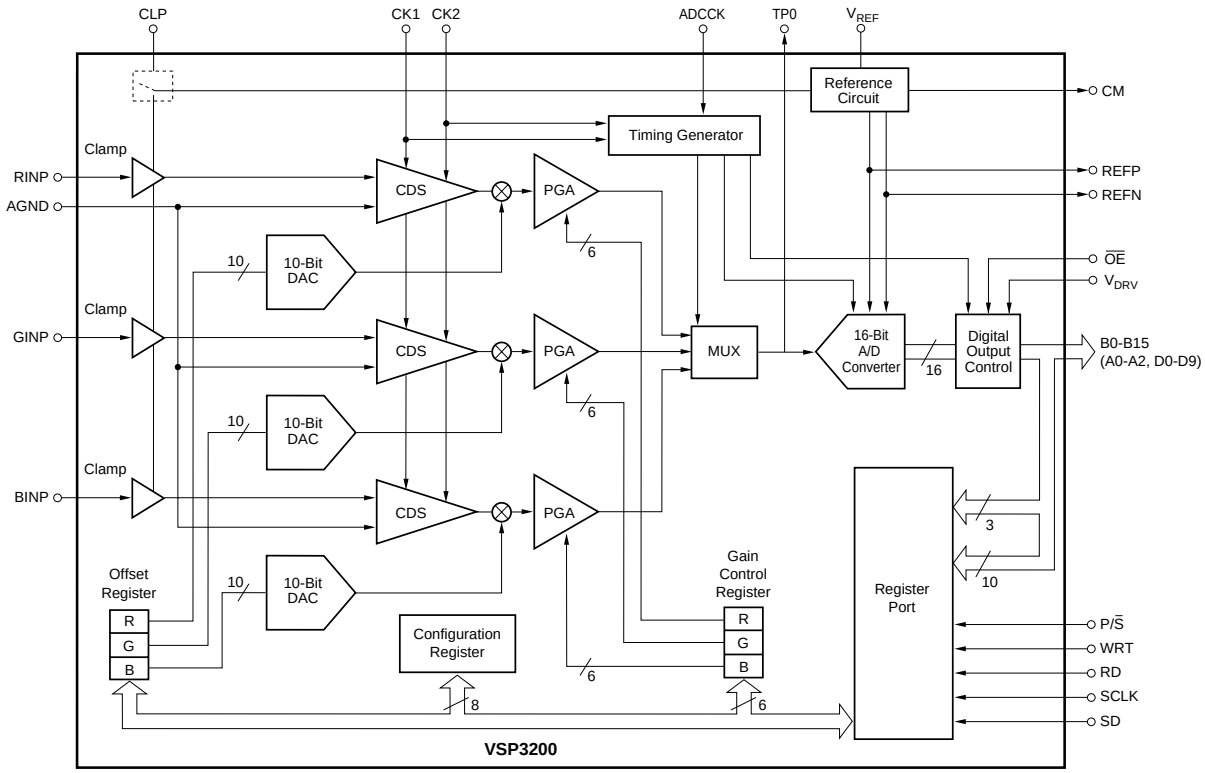
The VSP3200 and VSP3210 are complete CCD image processors that operate from single +5V supplies.

This complete image processor includes three Correlated Double Samplers (CDSs) and Programmable Gain Amplifiers (PGAs) to process CCD signals.

The VSP3200 is interface compatible with the VSP3210, which is a 16-bit, one-chip product.

The VSP3210 is pin-to-pin compatible with VSP3100, when in demultiplexed output mode.

The VSP3200 and VSP3210 can be operated from 0°C to +85°C, and are available in LQFP-48 packages.



TEXAS INSTRUMENTS

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PACKAGING INFORMATION

Orderable part number	Status (1)	Material type (2)	Package | Pins	Package qty | Carrier	RoHS (3)	Lead finish/ Ball material (4)	MSL rating/ Peak reflow (5)	Op temp (°C)	Part marking (6)
VSP3200Y	Obsolete	Production	LQFP (PT) | 48	-	-	Call TI	Call TI	0 to 85	VSP3200Y

(1) **Status:** For more details on status, see our product life cycle.

(2) **Material type:** When designated, preproduction parts are prototypes/experimental devices, and are not yet approved or released for full production. Testing and final process, including without limitation quality assurance, reliability performance testing, and/or process qualification, may not yet be complete, and this item is subject to further changes or possible discontinuation. If available for ordering, purchases will be subject to an additional waiver at checkout, and are intended for early internal evaluation purposes only. These items are sold without warranties of any kind.

(3) **RoHS values:** Yes, No, RoHS Exempt. See the TI RoHS Statement for additional information and value definition.

(4) **Lead finish/Ball material:** Parts may have multiple material finish options. Finish options are separated by a vertical ruled line. Lead finish/Ball material values may wrap to two lines if the finish value exceeds the maximum column width.

(5) **MSL rating/Peak reflow:** The moisture sensitivity level ratings and peak solder (reflow) temperatures. In the event that a part has multiple moisture sensitivity ratings, only the lowest level per JEDEC standards is shown. Refer to the shipping label for the actual reflow temperature that will be used to mount the part to the printed circuit board.

(6) **Part marking:** There may be an additional marking, which relates to the logo, the lot trace code information, or the environmental category of the part.

Multiple part markings will be inside parentheses. Only one part marking contained in parentheses and separated by a "~" will appear on a part. If a line is indented then it is a continuation of the previous line and the two combined represent the entire part marking for that device.

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