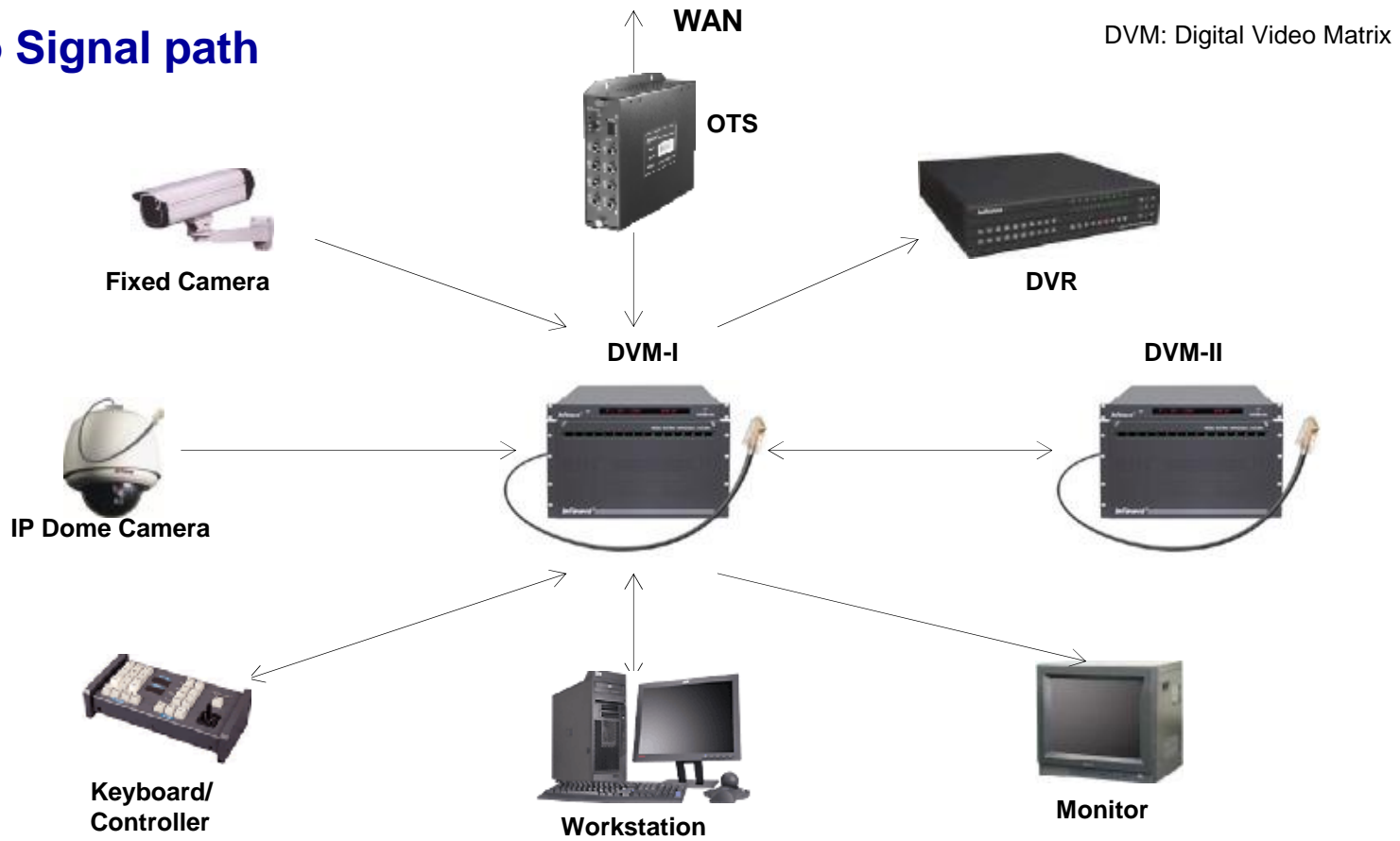




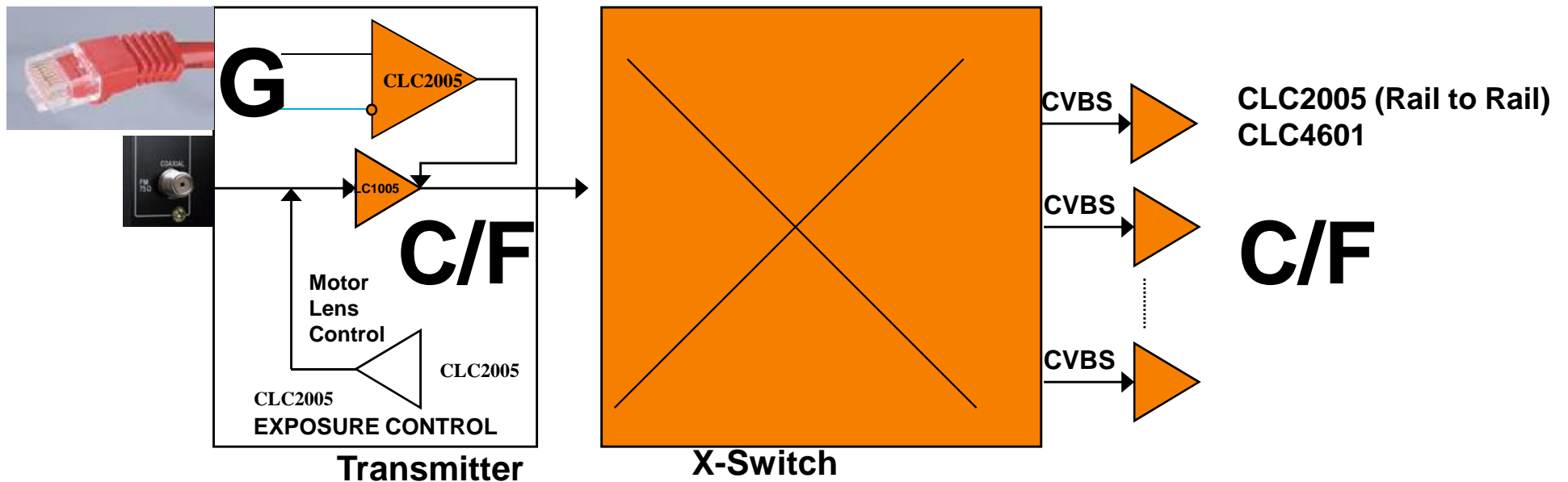
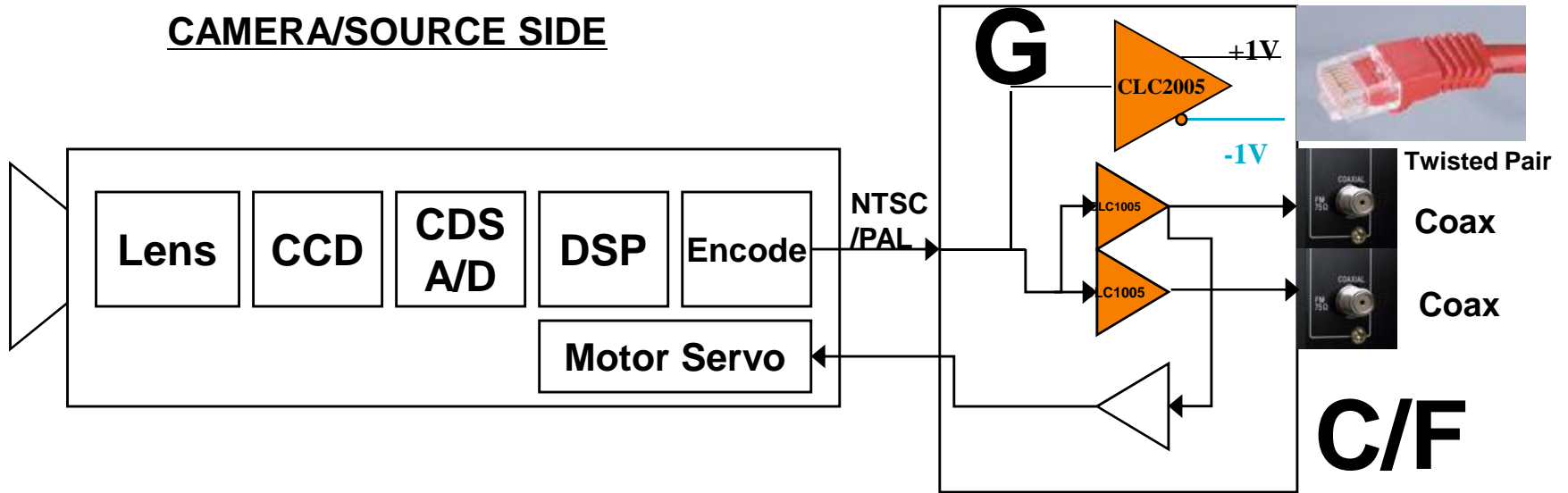
CADEKA Solution in Surveillance and Multimedia Video Audio Process

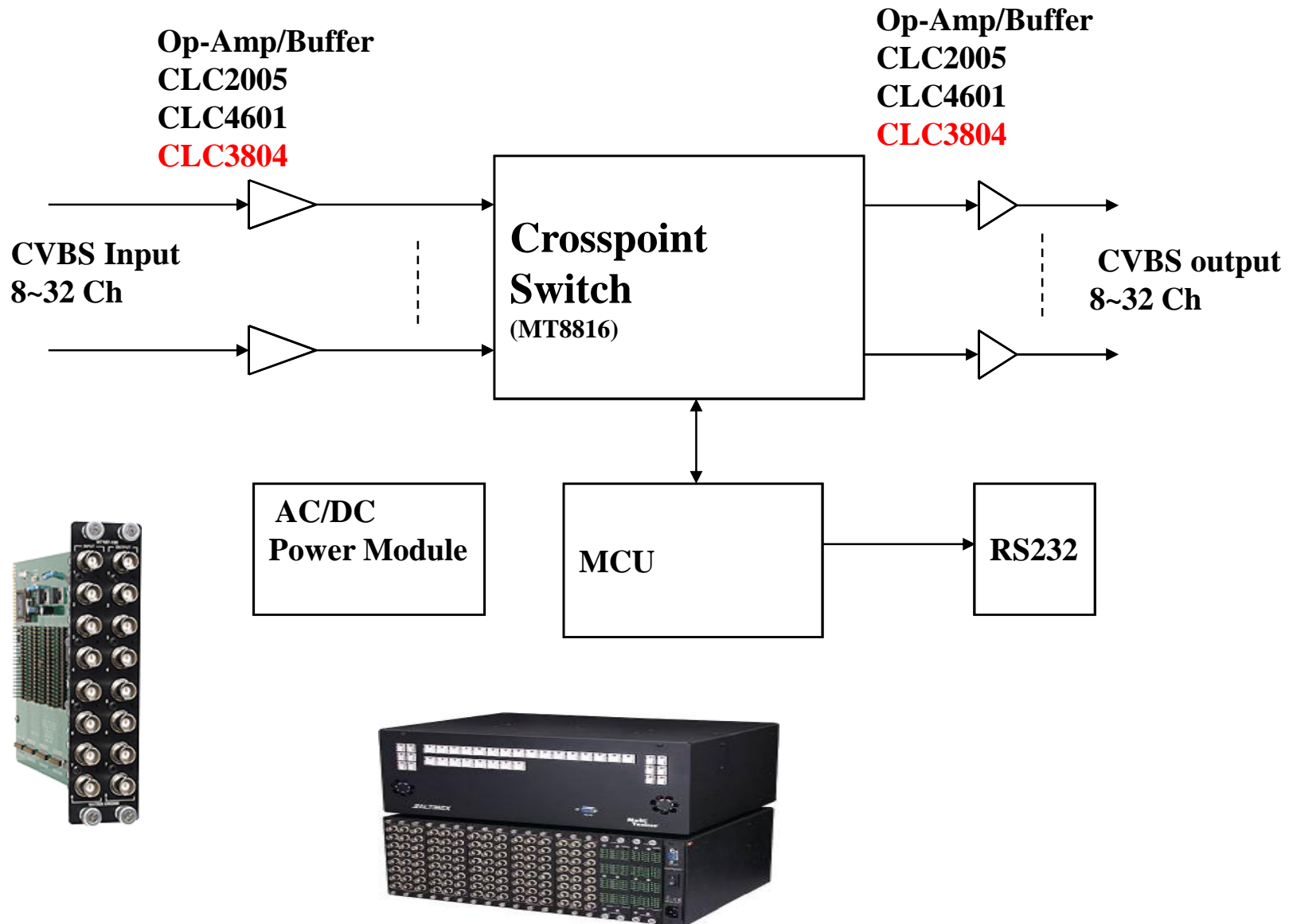


Video Signal path



CAMERA/SOURCE SIDE





- ü **CLC2005, 260MHz Bandwidth**
- ü **Dual Channel Rail to Rail Amplifier**
- ü **$\pm 55\text{mA}$ Current Output Op Amp**
- ü **Work at +5V Single Power Supply**
- ü **Up to 85dB Common Mode Rejection Ratio**
- ü **ESD Protection: 2.5kV (HBM)**
- ü **Industrial Temperature Range (-40° C to +85° C)**
- ü **Standard SOIC-8 Package**



Comlinear® CLC2005

Dual, Low Cost, +2.7V to 5.5V, 260MHz
Rail-to-Rail Amplifier

- ü **CLC4601, 550MHz Bandwidth, CFA**
- ü **Current Feedback Amplifier for Equalization**
- ü **Up to 1500V/uS Slew Rate**
- ü **Quad Channel High Speed Amplifier**
- ü **52mA Current Output Op Amp**
- ü **Work at +5V to +12V Single Power Supply**
- ü **Up to 55dB Common Mode Rejection Ratio**
- ü **ESD Protection: 2.5kV (HBM)**
- ü **Industrial Temperature Range (-40° C to +85° C)**
- ü **Standard SOIC-14 Package**



COMLINEAR® CLC2601, CLC3601, CLC4601
Dual, Triple, and Quad 550MHz Amplifiers

- ü **CLC2000, 450MHz Bandwidth, G=+1**
- ü **Dual Channel High Speed Amplifier**
- ü **$\pm 200\text{mA}$ Large Current Output Op Amp**
- ü **Work at +5V to +12V Single Power Supply**
- ü **Up to 80dB Common Mode Rejection Ratio**
- ü **ESD Protection: 2.5kV (HBM)**
- ü **Industrial Temperature Range (-40° C to +85° C)**
- ü **Standard SOIC-8 Package**



COMLINEAR® CLC2000

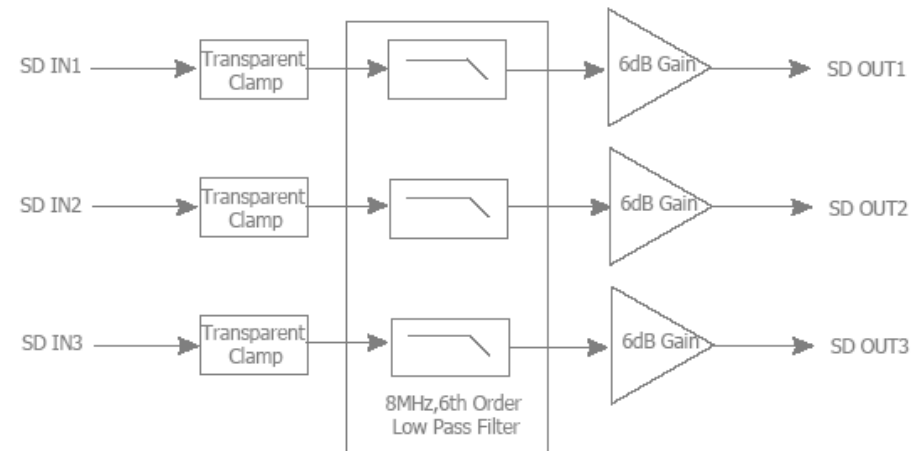
High Output Current Dual Amplifier

FEATURES

- Integrated 6th-order, 8MHz filters
- Integrated video drivers with 6dB gain
- 6mA supply current per channel
- CLC4814 includes disable feature
- 0.05%/0.02° differential gain/phase
- Transparent input clamp (DC level shift)
- AC or DC coupled inputs and outputs
- DC-coupled outputs remove the need for AC-coupling capacitors
- Each channel can drive 2V_{pp} into 1 or 2 video loads (150Ω or 75Ω)
- 0.1% THD
- Operates from 3V to 5V supplies
- CLC3804 package: SOIC-8
- CLC4804 package: MSOP-10, TSSOP-14
- CLC4814 package: TSSOP-14



CLC3804 - Functional Block Diagram



COMLINEAR® CLC3804, CLC4804, CLC4814
3 and 4-Channel SD Video Amplifiers with Filter

Video Amplifiers

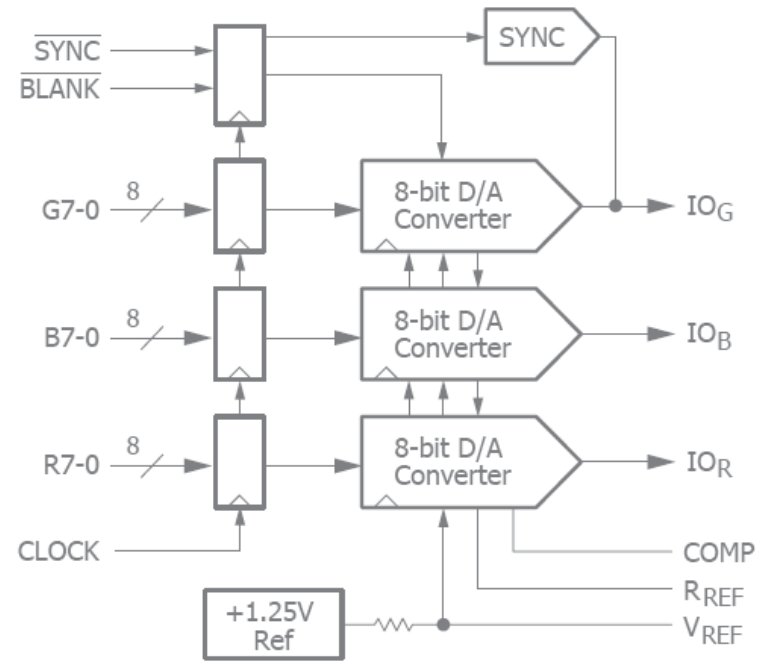
Part Number	# of Ch	Pwr Dwn	Rail to Rail	Input Includes $-V_S$	G_{min} (V/V)	BW@ G_{min} (MHz)	BW@ $G=2$ (MHz)	0.1dB BW (MHz)	SR (V/ μ s)	I_S per Ch (mA)	I_{OUT} (mA)	DG (%)	DP (deg)	e_n (nV/ \sqrt Hz)	Cross-talk (-dB)	Min V_S (V)	Max V_S (V)	Packages
CLC1004	1	Yes	No	No	2	750	750	200	1400	12	100	0.02	0.01	4	N/A	4.5	12	SOT23-6
CLC1005†	1	No	Out	Yes	1	260	90	9.5	145	4.2	55	0.06	0.07	16	N/A	2.5	5.5	SOT23-5, SOIC-8
CLC1006	1	No	No	No	2	500	500	50	1400	5.5	100	0.02	0.05	5	N/A	4.5	12	SOT23-5, SOIC-8
CLC1014	1	No	No	No	2	750	750	200	1400	12	100	0.02	0.01	4	N/A	4.5	12	SOT23-5
CLC1015†	1	Yes	Out	Yes	1	260	90	9.5	145	4.2	55	0.06	0.07	16	N/A	2.5	5.5	SOT23-6, SOIC-8
CLC1603	1	Yes	No	No	1	240	200	30	450	1.1	100	0.01	0.03	4	N/A	4.5	12	SOT23-6, SOIC-8
CLC1605	1	No	No	No	1	1500	1200	120	2500	12	120	0.01	0.01	3.7	N/A	4.5	12	SOT23-5
CLC1606	1	No	No	No	1	1300	1200	150	3300	7.5	120	0.01	0.01	3	N/A	4.5	12	SOT23-5, SOIC-8
CLC2000	2	No	No	No	1	510	250	32	210	7	200	0.009	0.06	4.5	62	5	13	SOIC-8
CLC2005	2	No	Out	Yes	1	260	90	9.5	145	4.2	55	0.06	0.07	16	62	2.5	5.5	SOIC-8
CLC2600	2	No	No	No	1	300	230	95	1300	3.3	50	0.03	0.04	6.4	56	8	12	SOIC-8
CLC2601	2	No	No	No	1	550	335	120	1500	5.2	52	0.01	0.06	7	56	8	12	SOIC-8
CLC3004	3	Yes	No	No	2	750	750	200	1400	12	100	0.02	0.01	4	70	4.5	12	SOIC-16
CLC3600	3	No	No	No	1	300	230	95	1300	4.4	50	0.03	0.04	6.4	56	8	12	SOIC-14
CLC3601	3	No	No	No	1	550	335	120	1500	6.93	52	0.01	0.06	7	56	8	12	SOIC-14
CLC3603	3	Yes	No	No	1	240	200	30	450	1.1	100	0.01	0.03	4	56	4.5	12	SOIC-16
CLC3605	3	Yes	No	No	1	1500	1200	120	2500	12	120	0.01	0.01	3.7	60	4.5	12	SOIC-16
CLC4600	4	No	No	No	1	300	230	95	1300	3.3	50	0.03	0.04	6.4	56	8	12	SOIC-8

Notes: N/A = Not Applicable, † Advance Information

-3dB 1.5G bandwidth, current feedback amplifier
Single – end input/output cabling driver/equalizer
3pole pre-emphasis/ equalization
up to 2500V/us slew rate
Gain=2, 6dB double terminated loads

FEATURES

- 8-bit resolution, 180MSPS
- $\pm 2.5\%$ gain matching
- $\pm 0.5\%$ linearity error
- Sync and blank controls
- 1.0V_{pp} video into 37.5Ω or 75Ω load
- Internal bandgap voltage reference
- Low glitch energy
- Single +3.3V power supply

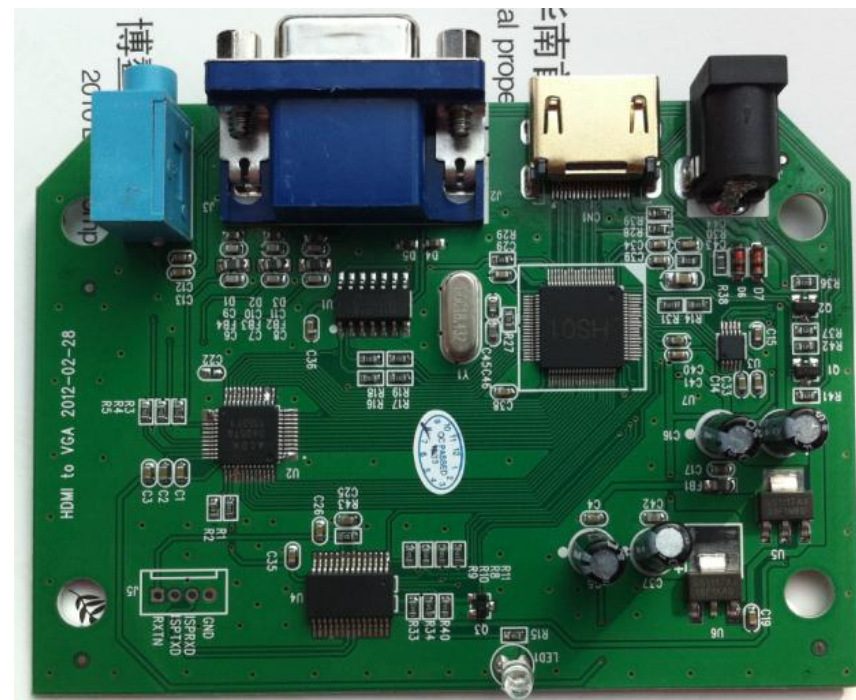


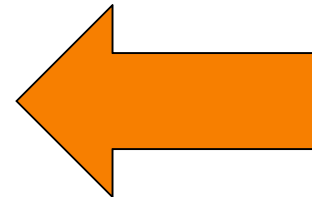
CDK3405

8-bit, 180MSPS, Triple Video DACs



CDK3405 & CLC2059





**CDK3405 &
CLC2059/2058**

THANK YOU TRUST CADEKA!

- Web Site: <http://www.cadeka.com>
- Application Contact Window:

Richard Yin
Mobile: +86 13828756907
Email: richard.yin@cadeka.com