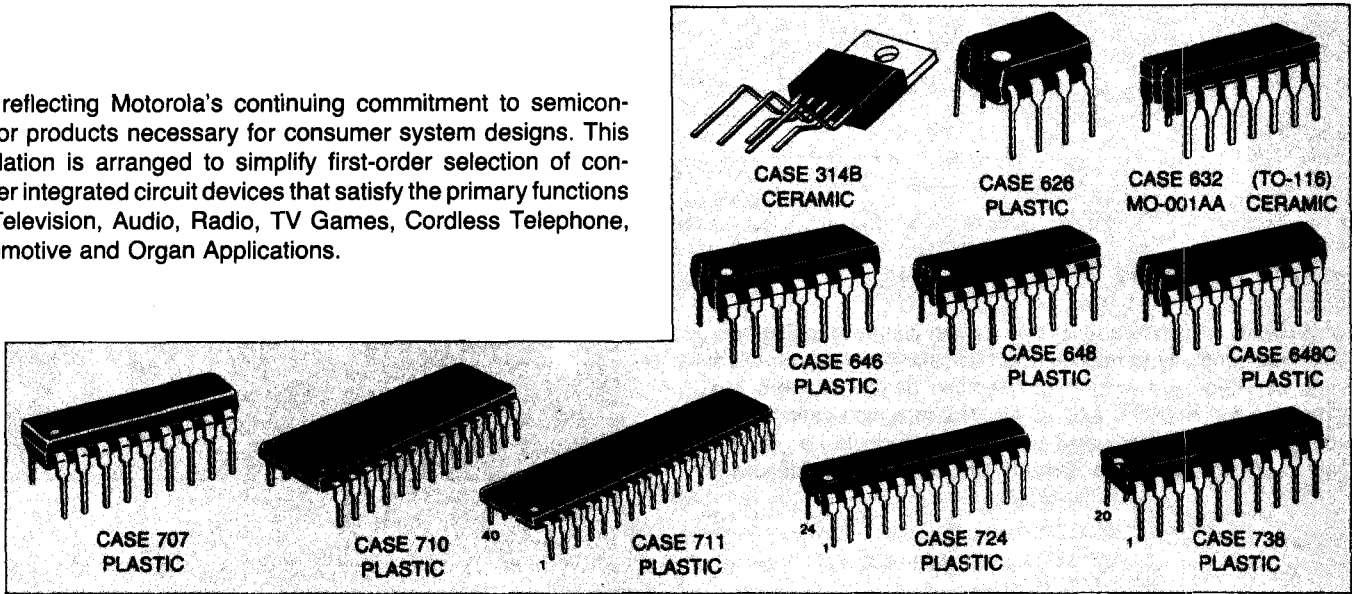


# Consumer and Automotive Circuits

... reflecting Motorola's continuing commitment to semiconductor products necessary for consumer system designs. This tabulation is arranged to simplify first-order selection of consumer integrated circuit devices that satisfy the primary functions for Television, Audio, Radio, TV Games, Cordless Telephone, Automotive and Organ Applications.



## T.V., Monitor, Hifi & Radio

### Television Subsystems

Function	Features	Case	Type
Monomax One Chip TV	Include video IF, detector, AGC, video amplifier, horizontal processor, vertical processor, and sync for 625 lines systems.	710-02	MC13002X
	Same as MC13002, but reverse AGC	710-02	MC13009X
Sound IF, Low Pass Filter, Detector, dc Volume Control, Preamplifier Power amplifier	Complete TV sound system; 100 $\mu$ V, dB limiting sensitivity, 4 Watts output; $V_{cc} = 24V$ ; $R_L = 16$	648C	TDA3190P

### Chroma

Function	Features	Case	Type
PAL, NTSC Decoder	Full multi-standard capability, on screen display (with fast blanking), three DC high impedance user controls, automatic black level set-up, beam current limiting. Low dissipation (typically 600mW)	711	TDA3300B
Secam Adaptor	Expands TDA3300B to SECAM, on-chip NTSC hue control, electronic on-chip Pal-Secam switching. Low dissipation (typically 400mW)	710	TDA3030B
PAL, NTSC Decoder	Full multi-standard capability, on chip contrast, brightness and saturation controls, automatic black level set-up, on-chip NTSC hue control, low dissipation (typically 600mW). No oscillator adjustment.	711	TDA3301,B
PAL, NTSC, Decoder	Same as TDA3301, but with different user control lows.	711	TDA3303
Chroma Decoder with RGB outputs.	Decodes PAL-NTSC. On-chip NTSC hue control. Burst gating either from standard sandcastle or on-chip generated from flyback pulse. No oscillator adjustment. Interfaces with TDA3030B.	724	TDA3330
Colour difference Decoder with R-Y & B-Y outputs.	Decodes PAL-NTSC On-chips NTSC hue control. No oscillator adjustment. Interfaces with TDA3030B	701	TDA3333

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## CONSUMER AND AUTOMOTIVE APPLICATIONS (continued)

### T.V., Monitor, Hifi & Radio (continued)

Function	Features	Case	Type
IF Amplifier	Power gain, wide age range, 12V single polarity power supply.	626	MC1350

#### Deflection

Function	Features	Case	Type
Horizontal & Vertical Processor	Includes sync, Separator, horizontal PLL's vertical countdown and vertical ramp generator and driver (625 lines).	738	MC13013A
	Same as above, except for 525 lines.	738	MC13012A
Horizontal & Vertical Processor	Includes SYNC Separator, Pulse Regulator, phase Detector, vertical Integrator and Oscillator, FBK Buffer and blanking Gate.	648	MC13015*

\* To be introduced

#### Sound

Function	Features	Case	Type
Sound IF, Low Pass dc Volume Control, Preamplifier	Complete TV sound system; 100uV, 3DB limiting.	648C	TDA3190P
Stereo Sound Control System	Stereo balance, volume, bass, treble control. Low component count. Supply Voltage 8.5-18V.	707	TCA5550

#### TV Tuning & Control Circuits

Function	Features	Case	Type
Synthesizer Amplifier & Driver in Bipolar I <sup>2</sup> L Technology	Direct tuner driver from 4 Band drivers. 60mA band driver capability. Direct control of the tuner's varicap diode.	648	UAA2001
16-Segment Led Driver	Led brightness control voltage. Current source segment driver output (so no external resistor for segment currents). No multiplexing (no RFI). Reliable data transfer from microprocessor Cascadable.	724	UAA2022
IR Remote Control Amplifier Detector	High gain pre-amp. Enveloped detector. Simple interface to microcomputer. Remote control decoder.	626	MC3373

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#### Power Supply Control

Function	Features	Case	Type
Flyback Converter Regulator Control Circuit	Wide operational range, high-voltage stability, direct control of switching transistors, low start-up current, reverse linear overload characteristic curve.	SIP9	TDA4601

#### FM Stereo Decoders

Function	Channel Separation dB TYP	TDH % TYP	STEREO Indicator	Features	Case	Type
FM Multiplex Stereo Decoder	40	0.3	75	Coiless operation	646	MC1310
FM Multiplex Stereo Decoder	47	0.1	50	6 Volt Operation	646	MC 1309
FM Multiplex Stereo Decoder	45	0.2	100	Variable blend	648	TCA4500A