

Service Data of Key ICs

Table 2 Functions and Service Data of OM8370 (N105)'s Pins

Pin No.	Functions Description	Digital Multimeter		
		Reference Voltage (V)	Positive Resistance (20K Ω)	Negative Resistance (20K Ω)
1	Port 1.3 or counter/timer 1 input	0.8	∞	∞
2	Port 1.6 or I ² C-bus clock line	4.2	6.5	6.0
3	Port 1.7 or I ² C-bus data line	4.2	6.5	6.0
4	Port 2.0 or tuning PWM output	1.128	13.1	10.2
5	Port 3.0 or ADC0 input or PWM0 output	0.36	∞	∞
6	Port 3.1 or ADC1 input or PWM1 output	3.29	1.64	1.64
7	Port 3.2 or ADC2 input or PWM2 output	3.29	1.67	1.67
8	Port 3.3 or ADC3 input or PWM3 output	4.91	7.8	7.3
9	Digital ground for μ -Controller core and periphery	0	0	0
10	Port 0.5 (8 mA current sinking capability for direct drive of LEDs)	0	7.2	6.99
11	Port 0.6 (8 mA current sinking capability for direct drive of LEDs)	4.17	7.7	7.3
12	Analog ground of Teletext decoder and digital ground of TV-processor	0	0	0
13	Internally connected	2.285	∞	0
14	2nd supply voltage TV-processor (+8V)	8.1	1.2	1.4
15	Supply voltage of digital circuit of TV-processor	4.96	∞	∞
16	Phase-2 filter	3.49	∞	∞
17	Phase-1 filter	3.81	∞	∞
18	Ground 3 for TV-processor	0	0	0
19	Bandgap decoupling	3.96	∞	∞
20	Automatic volume levelling (90° versions) / E-W drive output (110° versions)	0.78	∞	∞
21	Decoupling sound demodulator (QSS version in AM/FM mode)	2.3	∞	∞
22	Vertical drive B output	2.3	∞	∞
23	Vertical drive A output	1.85	∞	∞
24	IF input 1	1.85	∞	∞
25	IF input 2	3.82	∞	∞
26	Reference current input	3.75	∞	∞
27	Vertical sawtooth capacitor	1.36	4.75	4.73
28	Tuner AGC output	1.87	∞	∞
29	Audio deemphasis or SIF input 1	1.87	∞	∞

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30	Decoupling sound demodulator or SIF input 2	0	0	0
31	Ground 2 for TV processor	2.32	∞	∞
32	Narrow band PLL filter or AGC sound IF	0	∞	∞
33	Automatic volume levelling / sound IF input / subcarrier reference output / audio	3.1	11.2	10.9
34	Deemphasis	0.75	∞	∞
35	Horizontal output	2.60	∞	∞
36	Flyback input/sandcastle output	1.47	9.8	9.75
37	External audio output / QSS intercarrier out	2.43	∞	∞
38	EHT/overvoltage protection input	2.75	∞	∞
39	IF-PLL loop filter	8.1	1.2	1.35
40	IF video output / selected CVBS output	4	∞	∞
41	Supply voltage TV processor	0	0	0
42	CVBS/Y input	3.9	∞	∞
43	C input	1.55	∞	∞
44	Audio output /AM audio output (volume controlled)	4.44	∞	∞
45	2nd RGB / YUV insertion input	1.67	∞	∞
46	2nd R input / V (R-Y) input / PR input	2.5	∞	∞
47	2nd G input / Y input	2.5	∞	∞
48	2nd B input / U (B-Y) input / PB input	2.5	∞	∞
49	Beam current limiter input	1.87	∞	∞
50	Black current input / V-guard input	5.8	∞	∞
51	Red output	2.63	3.1	3.0
52	Green output	2.47	3.1	3.0
53	Blue output	2.69	3.1	3.0
54	Analog supply of Teletext decoder and digital supply of TV-processor (3.3 V)	3.27	0.67	0.65
55	OTP programming Voltage	0	0	0
56	Digital supply to core (3.3 V)	3.28	0.67	0.65
57	Oscillator ground supply	0	0	0
58	Crystal oscillator input	1.58	∞	∞
59	Crystal oscillator output	1.67	∞	∞
60	Reset	0	0	0
61	Digital supply to periphery (+3.3 V)	3.28	0.67	0.65
62	Port 1.0 or external interrupt 1 input	0	12.9	11.9
63	Port 1.1 or Counter/Timer 0 input	0	7.3	7.1
64	Port 1.2 or external interrupt 0 input	4.59	18.7	18.8