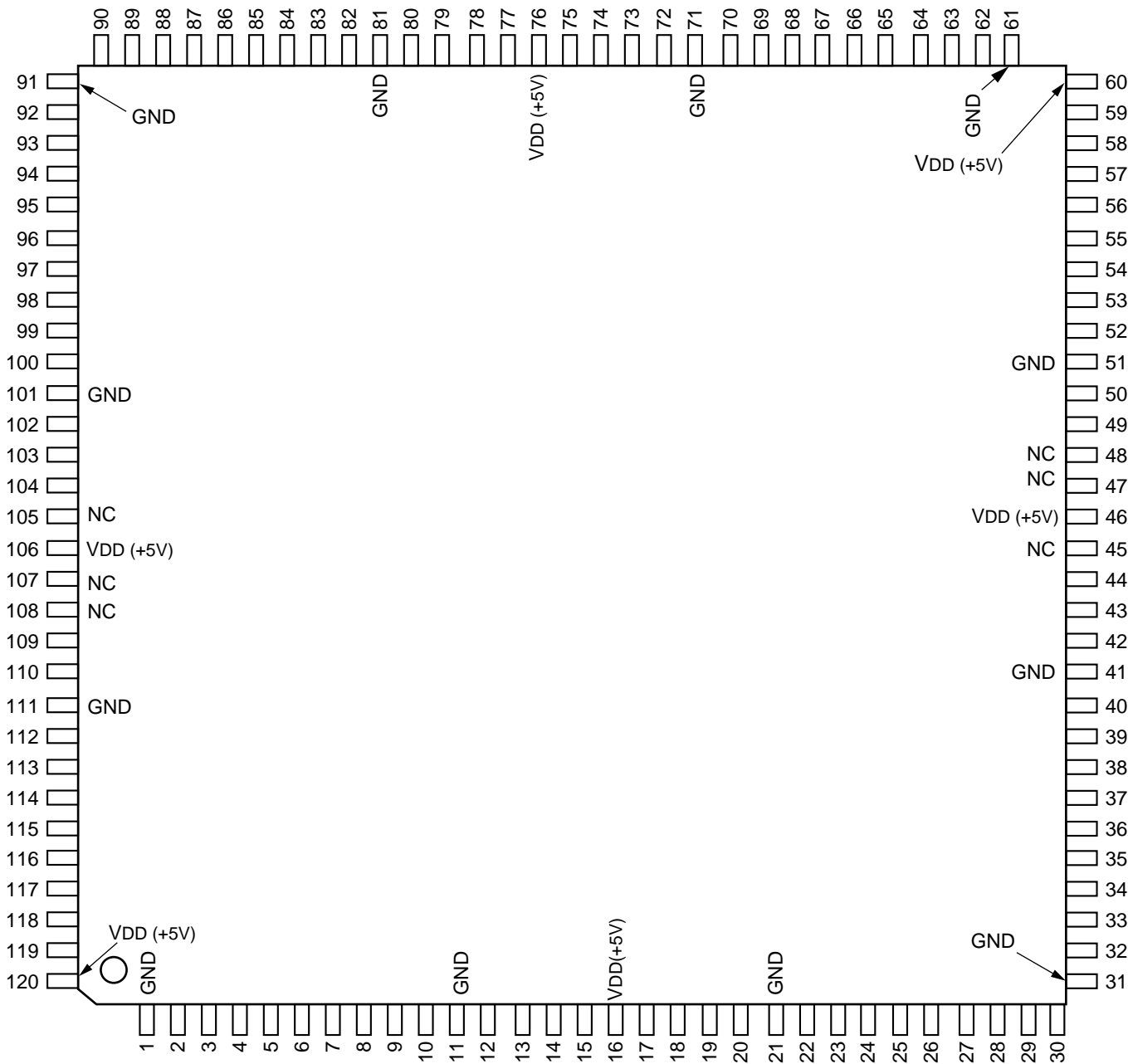


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C-MOS DIGITAL AUDIO TIME BASE EXPANSION FOR SIF RECEIVER  
—TOP VIEW—



(V<sub>DD</sub>=+5V)

PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL
1	—	GND	31	—	GND	61	—	GND	91	—	GND
2	IU	IT1	32	OT	C3/4	62	IU	OECRD	92	IU	AUX0 (LSB)
3	IU	$\overline{\text{CLR}}$	33	OT	C1/2	63	IU	CRA0 (LSB)	93	IU	AUX1
4	OT	DLY5 (MSB)	34	OT	U3/4	64	IU	CRA1	94	IU	AUX2
5	OT	DLY4	35	OT	U1/2	65	IU	CRA2	95	IU	AUX3
6	OT	DLY3	36	OT	V3/4	66	IU	CRA3	96	IU	AUX4
7	OT	DLY2	37	OT	V1/2	67	IU	CRA4	97	IU	AUX5
8	OT	DLY1	38	OT	AD3/4	68	IU	CRA5	98	IU	AUX6
9	OT	DLY0 (LSB)	39	OT	AD1/2	69	IU	CRA6 (MSB)	99	IU	AUX7
10	IU	$\overline{\text{OEDLY}}$	40	ID	$\overline{\text{OEAD}}$	70	IU	$\overline{\text{CREN}}$	100	IU	AUX8
11	—	GND	41	—	GND	71	—	GND	101	—	GND
12	IU	IT2	42	ID	BCK	72	O	$\overline{\text{ERR1}}$	102	IU	AUX9 (MSB)
13	IU	IT3	43	IU	LRCK	73	O	$\overline{\text{ERR2}}$	103	IU	ADFT
14	IU	IT4	44	O	OT2	74	O	$\overline{\text{ERR3}}$	104	IU	10/9
15	IU	IT5	45	—	NC	75	O	$\overline{\text{ERR4}}$	105	—	NC
16	—	V <sub>DD</sub>	46	—	V <sub>DD</sub>	76	—	V <sub>DD</sub>	106	—	V <sub>DD</sub>
17	IU	$\overline{\text{MUTE4}}$	47	—	NC	77	O	EXT1	107	—	NC
18	IU	$\overline{\text{MUTE3}}$	48	—	NC	78	O	EXT2	108	—	NC
19	IU	$\overline{\text{MUTE2}}$	49	IU	IT6	79	O	EXT3	109	IU	TRS
20	IU	$\overline{\text{MUTE1}}$	50	IU	CRCK	80	O	EXT4	110	ID	VCK
21	—	GND	51	—	GND	81	—	GND	111	—	GND
22	IU	CHEX1	52	OT	CRD7 (MSB)	82	OT	$\overline{\text{DIDPER}}$	112	IU	D2/D1
23	IU	CHEX0	53	OT	CRD6	83	OT	$\overline{\text{DIDERR}}$	113	IU	DID1
24	IU	AFS	54	OT	CRD5	84	OT	$\overline{\text{DBNPER}}$	114	IU	DID0
25	IU	LRS	55	OT	CRD4	85	OT	$\overline{\text{DBNERR}}$	115	IU	ERDB
26	IU	DIR	56	OT	CRD3	86	OT	$\overline{\text{DCPER}}$	116	IU	IT7
27	IU	20/16	57	OT	CRD2	87	OT	$\overline{\text{DCERR}}$	117	IU	IT8
28	O	OT1	58	OT	CRD1	88	OT	$\overline{\text{UDPER}}$	118	O	OT3
29	OT	Z3/4	59	OT	CRD0 (LSB)	89	OT	$\overline{\text{CSERR}}$	119	O	WRDL
30	OT	Z1/2	60	OT	V <sub>DD</sub>	90	IU	OEERR	120	—	V <sub>DD</sub>

U ; INPUT WITH PULL-UP REGISTER  
D ; INPUT WITH PULL-DOWN REGISTER  
OT ; TRI-STATE OUTPUT

**INPUT (WITH PULL-DOWN REGISTER)**

BCK ; DIGITAL AUDIO BIT CLOCK (= 64 x Fs)  
OEAD ; OUTPUT ENABLE FOR PINS 29 THROUGH 39 (L)  
VCK ; VIDEO CLOCK (= 4Fsc)

**INPUT (WITH PULL-UP REGISTER)**

10/9 ; INPUT AUX. DATA 10-BIT/9-BIT MODE SELECT  
20/16 ; DIGITAL AUDIO 20-BIT/16BIT SELECT  
ADFT ; AUX. DATA FLAG TIMING  
AFS ; DIGITAL AUDIO FORMAT SELECT  
CHEX1 ; CHANNEL EXCHANGE 1  
AUX0–AUX9 ; AUX. DATA 0–9  
CHEX0, 1 ; CHANNEL EXCHANGE 0,1  
CLR ; POWER ON CLEAR (L)  
CRA0–CRA6 ; CHANNEL STATUS READ ADDRESS 0–6  
CRCK ; CHANNEL STATUS READ ADDRESS WRITE CLOCK  
CREN ; CHANNEL STATUS READ ADDRESS WRITE ENABLE (L)  
D2/D1 ; VIDEO FORMAT D2/D1 SELECT  
DID0, 1 ; DATA ID BIT 0,1  
DIR ; DIGITAL AUDIO MSB FIRST/LSB FIRST SELECT  
ERDB ; ERROR OVERRIDE FOR CIRCUIT DEBUG  
IT1–8 ; TEST (L)  
LRCK ; DIGITAL AUDIO L/R CLOCK (= Fs)  
LRS ; DIGITAL AUDIO LEFT/RIGHT BIT POSITION SELECT  
MUTE1–MUTE4 ; DIGITAL AUDIO CH1–CH4 MUTE (L)  
OECD ; OUTPUT ENABLE FOR CRD0–7  
OEPLY ; OUTPUT ENABLE FOR DLY0-5 (L)  
OEERR ; OUTPUT ENABLE FOR PINS 82 THROUGH 89  
TRS ; VIDEO H-SYNC

**OUTPUT**

ERR1–ERR4 ; DIGITAL AUDIO CH1–CH4 ERROR (L)  
EXT1–EXT4 ; DIGITAL AUDIO CH1-CH4 EXIST  
OT1 ; TEST (MEMORY READ)  
OT2 ; TEST (READ CLEAR)  
OT3 ; TEST (MEMORY WRITE)  
WRDL ; TEST (WRITE/READ DELAY)

**OUTPUT (TRI-STATE)**

AD1/2 ; DIGITAL AUDIO CH-1/2 DATA  
AD3/4 ; DIGITAL AUDIO CH-3/4 DATA  
C1/2 ; DIGITAL AUDIO CH-1/2 CHANNEL STATUS BIT  
C3/4 ; DIGITAL AUDIO CH-3/4 CHANNEL STATUS BIT  
CRD0–CRD7 ; CHANNEL STATUS READ DATA0–7  
CSERR ; CHECK SUM ERROR (L)  
DBNERR ; DBN UNCONTINUITY ERROR (L)  
DBNPER ; DBN PARITY ERROR (L)  
DCERR ; DC UNMATCH ERROR (L)  
DCPER ; DC PARITY ERROR (L)  
DIDERR ; DID UNMATCH ERROR (L)  
DIDPER ; DID PARITY ERROR (L)  
DLY0–DLY5 ; SAMPLE DELAY INDICATOR BIT0–5  
U1/2 ; DIGITAL AUDIO CH-1/2 USER DATA BIT  
U3/4 ; DIGITAL AUDIO CH-3/4 USER DATA BIT  
UDPER ; UD PARITY ERROR (L)  
V1/2 ; DIGITAL AUDIO CH-1/2 VALIDITY FLAG  
V3/4 ; DIGITAL AUDIO CH-3/4 VALIDITY FLAG  
Z1/2 ; DIGITAL AUDIO CH-1/2 BLOCK SYNC (Z-FLAG)  
Z3/4 ; DIGITAL AUDIO CH-3/4 BLOCK SYNC (Z-FLAG)

104	10/9	AD1/2	39
		AD3/4	38
17	MUTE4	NC	108
18	MUTE3	NC	107
19	MUTE2	NC	105
20	MUTE1	NC	48
117	IT8	NC	47
116	IT7	NC	45
49	IT6	CSERR	89
15	IT5	UDPER	88
14	IT4	DCERR	87
13	IT3	DCPER	86
12	IT2	DBNERR	85
2	IT1	DBNPER	84
		DIDERR	83
22	CHEX1	DIDPER	82
23	CHEX0		
		DLY5	4
113	DID1	DLY4	5
114	DID0	DLY3	6
69	CRA6	DLY2	7
68	CRA5	DLY1	8
67	CRA4	DLY0	9
66	CRA3		
65	CRA2		
64	CRA1		
63	CRA0		
62	OECRD		
70	CREN	EXT4	80
50	CRCK	EXT3	79
115	EROB	EXT2	78
90	OEERR	EXT1	77
10	OEDLY	ERR4	75
40	OEAD	ERR3	74
43	LRCK	ERR2	73
42	BCK	ERR1	72
27	20/16	WROL	119
26	DIR	OT3	118
25	LRS	OT2	44
24	AFS	OT1	28
109	TRS	CRD7	52
		CRD6	53
103	ADFT	CRD5	54
102	AUX9	CRD4	55
100	AUX8	CRD3	56
99	AUX7	CRD2	57
98	AUX6	CRD1	58
97	AUX5	CRD0	59
96	AUX4		
95	AUX3	Z3/4	29
94	AUX2	Z1/2	30
93	AUX1	C3/4	32
92	AUX0	C1/2	33
112	D2/D1	U3/4	34
110	VCK	U1/2	35
3	CLR	V3/4	36
		V1/2	37