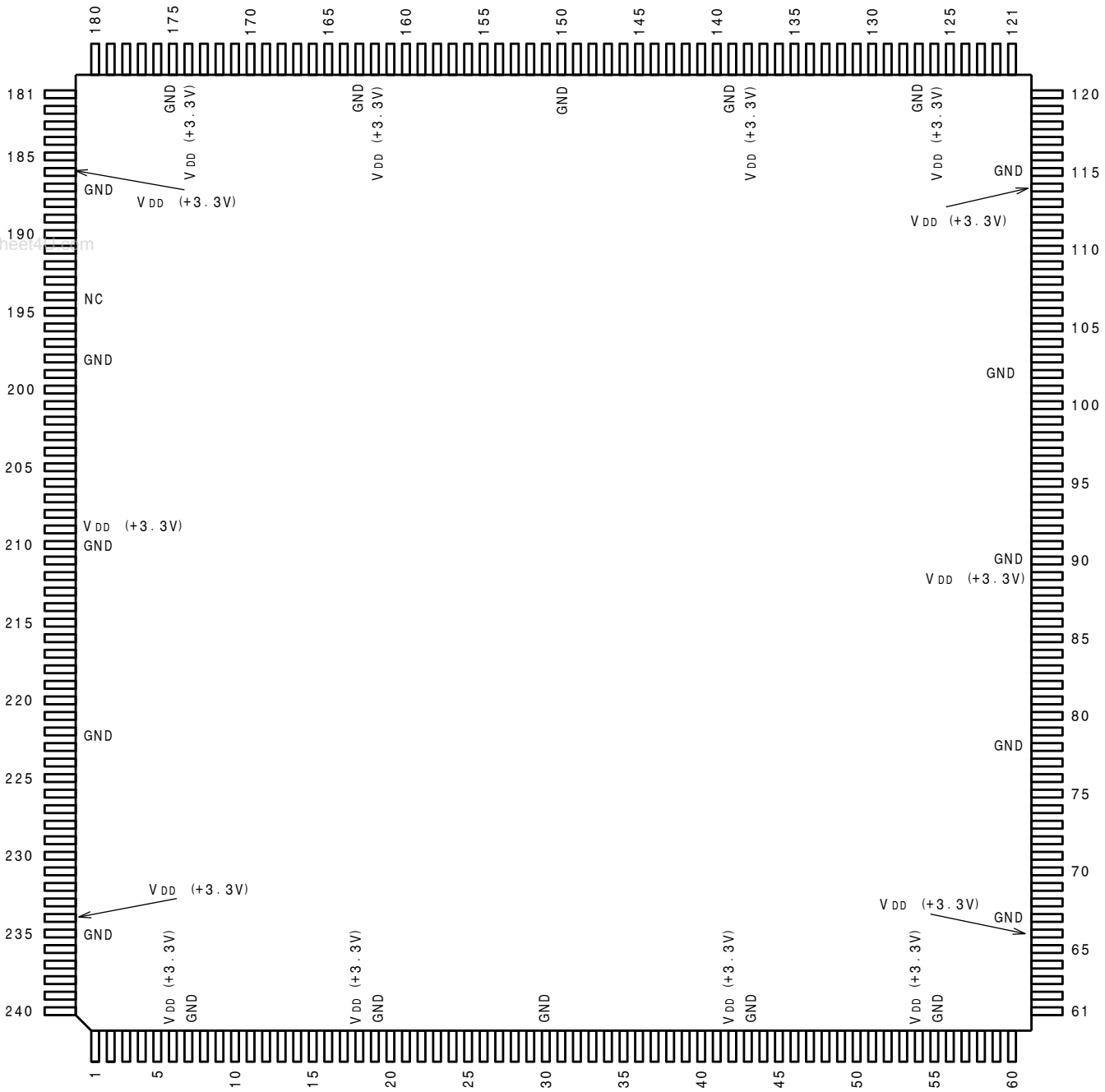
C-MOS PROGRAM PLAY PROCESSOR

-TOP VIEW-



(V_{DD} =+3.3V)

PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL
1	O	AA12	49	I	CF11	97	I/O	SYSIO5	145	I	PPDEDT7	193	O	PPDATA0
2	O	AA11	50	I	CF10	98	I/O	SYSIO4	146	I	PPDEDT6	194	-	NC
3	O	AA10	51	I	CF9	99	I	STRB	147	I	PPDEDT5	195	O	WP
4	O	AA9	52	I	CF8	100	I	SCS	148	I	PPDEDT4	196	O	GIVEUP
5	O	AA8	53	I	CF7	101	I	DEFS256	149	I	PPDEDT3	197	I	PPDEAU1
6	-	V_{DD}	54	-	V_{DD}	102	-	GND	150	-	GND	198	-	GND
7	-	GND	55	-	GND	103	O	FS256P	151	I	PPDEDT2	199	I	PPDEAU0
8	O	AA7	56	I	CF6	104	I	DEFS	152	I	PPDEDT1	200	I/O	AMAIO15
9	O	AA6	57	I	CF5	105	I	IBUSEN	153	I	PPDEDT0	201	I/O	AMAIO14
10	O	AA5	58	I	CF4	106	O	OBUSEN	154	I	PPDEPRY	202	I/O	AMAIO13
11	O	AA4	59	I	CF3	107	I/O	SYSIO3	155	I	PPDESY	203	I/O	AMAIO12
12	O	AA3	60	I	CF2	108	I/O	SYSIO2	156	I	PPDEEF	204	I/O	AMAIO11
13	O	AA2	61	I	CF1	109	I/O	SYSIO1	157	I	FSPI	205	I/O	AMAIO10
14	O	AA1	62	I	CF0	110	I/O	SYSIO0	158	O	MRST	206	I/O	AMAIO9
15	O	AA0	63	O	CA14	111	I	STAT1	159	I	MI7	207	I/O	AMAIO8
16	O	AB15	64	O	CA13	112	I	STAT0	160	I	MI6	208	I/O	AMAIO7
17	O	AB14	65	O	CA12	113	I	MCK	161	I	MI5	209	-	V_{DD}
18	-	V_{DD}	66	-	V_{DD}	114	-	V_{DD}	162	-	V_{DD}	210	-	GND
19	-	GND	67	-	GND	115	-	GND	163	-	GND	211	I/O	AMAIO6
20	O	AB13	68	O	CA11	116	I	PPCK	164	I	MI4	212	I/O	AMAIO5
21	O	AB12	69	O	CA10	117	I	$\overline{CHIPID}$	165	I	MI3	213	I/O	AMAIO4
22	O	AB11	70	O	CA9	118	O	SYSHL0	166	I	MI2	214	I/O	AMAIO3
23	O	AB10	71	O	CA8	119	O	SYSHL1	167	I	MI1	215	I/O	AMAIO2
24	O	AB9	72	O	CA7	120	O	VPHASE	168	I	MI0	216	I/O	AMAIO1
25	O	AB8	73	O	CA6	121	O	APHASE	169	I	MIEF	217	I/O	AMAIO0
26	O	AB7	74	O	CA5	122	O	CPHASE	170	O	$\overline{MWEN0}$	218	I/O	AMBIO15
27	O	AB6	75	O	CA4	123	O	RPHASE	171	O	$\overline{MWEN1}$	219	I/O	AMBIO14
28	O	AB5	76	O	CA3	124	O	$\overline{PTWEN}$	172	O	$\overline{MWEN2}$	220	I/O	AMBIO13
29	O	AB4	77	O	CA2	125	O	PPREFV	173	O	$\overline{MWEN3}$	221	I/O	AMBIO12
30	-	GND	78	-	GND	126	-	V_{DD}	174	-	V_{DD}	222	-	GND
31	O	AB3	79	O	CA1	127	-	GND	175	-	GND	223	I/O	AMBIO11
32	O	AB2	80	O	CA0	128	I	$\overline{RESET}$	176	O	$\overline{MREN0}$	224	I/O	AMBIO10
33	O	AB1	81	I	MDTES4	129	I	REFV	177	O	$\overline{MREN1}$	225	I/O	AMBIO9
34	O	AB0	82	I	MDTES3	130	O	PITY	178	O	$\overline{MREN2}$	226	I/O	AMBIO8
35	I	CF23	83	I	MDTES2	131	O	PITX	179	O	$\overline{MREN3}$	227	I/O	AMBIO7
36	I	CF22	84	I	MDTES1	132	I	MCDT7	180	O	ASUB	228	I/O	AMBIO6
37	I	CF21	85	I	MDTES0	133	I	MCDT6	181	O	PPPRY	229	I/O	AMBIO5
38	I	CF20	86	O	SELECT	134	I	MCDT5	182	O	PPSY	230	I/O	AMBIO4
39	I	CF19	87	O	PPAU1	135	I	MCDT4	183	O	PPEF	231	I/O	AMBIO3
40	I	CF18	88	O	PPAU0	136	I	MCDT3	184	O	PPDATA7	232	I/O	AMBIO2
41	I	CF17	89	-	V_{DD}	137	I	MCDT2	185	O	PPDATA6	233	I/O	AMBIO1
42	-	V_{DD}	90	-	GND	138	-	V_{DD}	186	-	V_{DD}	234	-	V_{DD}
43	-	GND	91	I	FS256	139	-	GND	187	-	GND	235	-	GND
44	I	CF16	92	I	FS	140	I	MCDT1	188	O	PPDATA5	236	I/O	AMBIO0
45	I	CF15	93	O	MUTE	141	I	MCDT0	189	O	PPDATA4	237	O	$\overline{AMWEN}$
46	I	CF14	94	O	PPCKO	142	O	PTOE	190	O	PPDATA3	238	O	AA15
47	I	CF13	95	I/O	SYSIO7	143	O	FOWRST	191	O	PPDATA2	239	O	AA14
48	I	CF12	96	I/O	SYSIO6	144	O	FORRST	192	O	PPDATA1	240	O	AA13

INPUT

CF0-23	;AUDIO RATE CONVERTER COEFFICIENTS
$\overline{\text{CHIPID}}$	;CHIP IDENTIFICATION
DEFS	;DECODER AUDIO FREQUENCY (48kHz OR VARIABLE)
DEFS256	;DECODER AUDIO FREQUENCY (48kHzX256 OR VARIABLE)
FS	;AUDIO REFERENCE FREQUENCY (48kHz)
FS256	;AUDIO REFERENCE FREQUENCY (48kHzX256)
FSP1	;AUDIO PROGRAM PLAY FREQUENCY (48kHz ±15%)
IBUSEN	;SYSTEM CONTROL INTERFACE SYSIO0-7 BUS SWITCH
MCDT0-7	;MOVING COMPENSATE 2-FIELD DELAY DATA
MCK	;MASTER CLOCK (13.5MHz)
MDTES0-4	;TEST PINS (NORMALLY LOW)
MI0-7	;FIFO MEMORY DATA
MIEF	;FIFO MEMORY ERROR DATA
PPCK	;PROGRAM PLAY CLOCK (13.5MHz ±15%)
PPDEAU0, 1	;AUDIO SERIAL DATA CH1/CH2, CH3/CH4
PPDEDT0-7	;VIDEO 8-BIT DATA
PPDEEF	;VIDEO ERROR FLAG
PPDEPRY	;VIDEO PARITY FLAG
PPDESY	;VIDEO SYNCHRONOUS PULSE
REFV	;REFERENCE VD
$\overline{\text{RESET}}$	;CHIP RESET PULSE
SCS	;SYSTEM CONTROL INTERFACE CHIP SELECT
STAT0, 1	;SYSTEM CONTROL INTERFACE STATES
STRB	;SYSTEM CONTROL INTERFACE CLOCK

OUTPUT

AA0-15	;AUDIO A MEMORY CONTROL ADDRESSES
AB0-15	;AUDIO B MEMORY CONTROL ADDRESSES
$\overline{\text{AMWEN}}$	;AUDIO MEMORY WRITE ENABLE
APHASE	;AUDIO CLOCK PHASE DETECTION
ASUB	;PITCH SHIFT CONTROL SIGNAL
CA0-14	;AUDIO RATE CONVERTER COEFFICIENTS ADDRESSES
CPHASE	;AUDIO VIDEO CLOCK PHASE DETECTION
FORRST	;FIFO READ RESET PULSE
FOWRST	;FIFO WRITE RESET PULSE
FS256P	;AUDIO PROGRAM PLAY FREQUENCY (48kHzX256 ±15%)
GIVEUP	;AUDIO PITCH DETECTION FAILUER MONITOR
$\overline{\text{MRENO-3}}$	;FRAME SYSNCHRONIZER CONTROL READ ENABLE PULSES
MRST	;FIFO READ RESET
MUTE	;AUDIO MUTE SERIAL SIGNAL
$\overline{\text{MWENO-3}}$	;FRAME SYSNCHRONIZER CONTROL WRITE ENABLE PULSES
OBUSEN	;SYSTEM CONTROL INTERFACE I/O BUS CONTROL
PITX	;CHANNEL A AUDIO PITCH WIDTH MONITOR
PITY	;CHANNEL B AUDIO PITCH WIDTH MONITOR
PPAU0, 1	;AUDIO SERIAL DATA CH1/CH2, CH3/CH4
PPCKO	;SELECTED VIDEO CLOCK
PPDATA0-7	;VIDEO 8-BIT DATA
PPEF	;VIDEO ERROR FLAG
PPPRY	;VIDEO PARITY FLAG
PPREFV	;PROGRAM PLAY REFERENCE VD
PPSY	;VIDEO SYNCHRONOUS PULSE
PTOE	;AUDIO SUB MEMORY OUTPUT ENABLE
$\overline{\text{PTWEN}}$	;AUDIO SUB MEMORY WRITE ENABLE
RPAHSE	;AUDIO CLOCK REFERENCE PHASE DETECTION
SELECT	;AUDIO SWITCH PULSE
SYSHL0, 1	;SYSTEM CONTROL PORTS
VPHASE	;VIDEO CLOCK PHASE DETECTION
WP	;AUDIO WINDOW PULSE

INPUT/OUTPUT

SYSIO0-7	;SYSTEM CONTROL INTERFACE DATA
AMAIO0-15	;AUDIO A MEMORY DATA I/O
AMBIO0-16	;AUDIO B MEMORY DATA I/O