## ELECTRONIC COMPONENTS & APPLICATIONS

Index to Volume 8

## Contents

NUMBER 1		Cascode-driven SMPS with high-voltage darlington	
High-speed 12-bit tracking ADC using		transistors	101
programmable logic sequences	2	T. v.d. Wouw	
D. Wong	_	Fast controller converts large static RAMs to FIFO	
		buffers	109
Ceramic-chip capacitors – high-rel products with a		N. Siddique and F. Krupecki	
promising future	15	,	
W. Langenhorst and R. Waser		Managing graphics displays using a	
		microcontroller	113
Stereo sound generator for sound effects and music	2.	S. Baliga	
synthesis	21		
M. Roberts		Improved varicaps for TV tuners	118
Harvard architecture pushes microcontroller IC into		D. Eckstein and R.W. Stamer	
high-speed realm	32		
G. Goodhue, J. Jenkins and A. Khan			
Integrated video programming system (VPS)			
decoder	39	NUMBER 3	
A. Lentzer and G. Stäcker			
		Two-chip modem for high-speed LAN systems	130
High-temperature electrolytic capacitors	45	P.M. Shah	
A. Otten and J. Slakhorst			
Lanca and Complete Transfer LaICTA Day		Multiple-step stress testing proves the reliability of	
Integrated Services Terminal (IST) Bus -	53	solid aluminium capacitors	137
the low-cost LAN and associated interface	52	E. Decker and H. Schmickl	
R. Kohlman		Third-generation decoding ICs for CD players	145
		R. Finck and D. Slowgrove	
		N. Fine Canal De Salver Service	
		Single-heterojunction GaAlAs - a new technology for	
		infrared LEDs and optocouplers	153
		M.C. Boissy	
NUMBER 2		Highly-accelerated humidity testing of CMOS	
		ICs	156
ACLAdvanced CMOS Logic that lengthens the		W. Nachbauer	
stride of low-power systems	66		
R. Croes and A. de Pagter		New pinouts for ACL add reliability and simplicity to	
	7.	logic systems	167
Microcontroller eases I/O processing burden	76	R. Croes and A. de Pagter	
S. Baliga, G. Goodhue and J. Jenkins		Video ADCs using folding and interpolation	
Breakover diodes for the protection of telephone		techniques	171
equipment	81	P. Piver	.,,
D. Haslem and M.J. Hill		7.7700	
		Enhanced computer-controlled Teletext circuit	
Quality – dry reed switches	87	SAA5243	175
F.A. Pieters		J. Kinghorn	
The SCC68070 – a monolithic 68000 CPU and		First multistandard decoder chip-set for DBS TV	186
peripherals	95	·	
G. Conn		Research News	189

NUMBER 4		Diodes	
	101	Breakover diodes for the protection of telephone	
SAL capacitors for automotive applications	194	equipment	81
E. Dekker		Redesign of small-signal switching diodes in SOT	• 0.0
Redesign of small-signal switching diodes in SOT		packages	208
packages	208		
C. Hartman and M. Hillen		Display systems	
C. Hariman and M. Hinen		Managing graphics displays using a	
Blind and buried vias for multilayer PCBs	212	microcontroller	113
A. Goberecht		An angle on the corners	2.5
		the new approach in shadow-mask design	215
An angle on the corners			
the new approach in shadow-mask design	215	Logic families	
C. Admiraal and H. Bongenaar		ACLAdvanced CMOS Logic that lengthens the	66
The state of the s		stride of low-power systems	(it)
The magnetoresistive sensor		New pinouts for ACL add reliability and	167
a sensitive device for detecting magnetic-field	222	simplicity to logic systems	239
variations	222	HCMOS FIFOs and their applications	209
A. Petersen		Ontaslastroniae	
HCMOS FIFOs and their applications	239	Optoelectronics	
R. Volgers		Single-heterojunction GaAlAs - a new technology for infrared LEDs and	
			153
		optocouplers	1.7.7
		Power supplies	
		Cascode-driven SMPS with high-voltage	
		darlington transistors	101
Subject Index			
ASICs		Printed circuit boards	
High-speed 12-bit tracking ADC using		Blind and buried vias for multilayers PCBs	212
programmable logic sequences	2	Difficulty Current Charles Control of Contro	
,		Quality	
Audio		Quality – dry reed switches	87
Stereo sound generator for sound effects and music		Highly-accelerated humidity testing of CMOS	
synthesis	21	ICs	156
Third-generation decoding ICs for CD players	145		
		Sensors	
Capacitors		The magnetoresistive sensor	
Ceramic-chip capacitors – high-rel products with a		a sensitive device for detecting magnetic-field	
promising future	15	variations	222
High-temperature electrolytic capacitors	45		
Multiple-step stress testing proves the reliability		Telecom	
of solid aluminium capacitors	137	Integrated Services Terminal (IST) Bus – the low-	
SAL capacitors for automotive application	194	cost LAN and associated interface	52
n . n		The second second	
Data Processing		Television, video	
Harvard architecture pushes microcontroller IC	22	Integrated video programming system (VPS)	39
into high-speed realm	32 76	decoder	.99 118
Microcontroller eases I/O processing burden	/0	Improved varicaps for TV tuners	118
The SCC68070 – a monolithic 68000 CPU and	95	Video ADCs using folding and interpolation	171
peripherals	90	techniques  Enhanced computer controlled Talatest circuit	1/1
Fast controller converts large static RAMs to FIFO	109	Enhanced computer-controlled Teletext circuit SAA5243	175
buffers Two skip modern for high around LAN customs			186
Two-chip modem for high-speed LAN systems	130	First multistandard decoder chip-set for DBS TV	100

## Contributor Index

Admiraal C.	215	Langenhorst W.	15
Baliga S.	76, 113	Lentzer A.	39
Boissy M.C.	153	Nachbauer W.	156
Bongenaar H.	215	Otten A.	45
Conn G.	95	Pagter A. de	66, 167
Croes R.	66. 167	Petersen A.	222
Dekker E.	137, 194	Pieters F.A.	87
Eckstein D.	118	Piver P.	171
Finck R.	145	Roberts M.	21
Goberecht A.	212	Schmickl H.	137
Goodhue G.	32, 76	Shah P.M.	130
Hartman C.	208	Siddique N.	109
Haslem D.	81	Slakhorst J.	45
Hill M.J.	81	Slowgrove D.	145
Hillen M.	208	Stäcker G.	39
Jenkins J.	32, 76	Stamer R.W.	118
Khan A.	32	Volgers R.	239
Kinghorn J.	175	Waser R.	15
Kohlman R.	52	Wong D.	2
Krupecki F.	109	Wouw T. v.d.	101

Electronic Components & Applications is published four times a year by Philips Components, The Netherlands, in cooperation with associated companies in England, Germany and the USA.

It is intended for those who have a professional need to keep up to date on electronic component and circuit developments.

Its contents are gathered from research, application and quality control laboratories and the factories of Philips Components around the globe.

Technical enquiries and requests for rights to reprint or translate articles should be addressed to the Editor, EC&A, Philips Components, Marketing Communications, Eindhoven, The Netherlands.

Abstracts or references should mention title, author, and the source: Electronic Components & Applications, published by Philips Components, Eindhoven, The Netherlands.

## Subscription

The subscription rate for Volume 8 is \$15.00/£8.00/Hfl.40.00, postage paid; supplementary charge for airmail to countries outside Europe, \$6.00.

Subscription enquiries should be addressed to Philips Components, Marketing Communications, Building BA, 5600 MD Eindhoven, The Netherlands.

Att. Mr. Jan van den Boom, Telex 35000 phtcnl.