

Digital Computer Laboratory  
 Massachusetts Institute of Technology  
 Cambridge 39, Massachusetts

SUBJECT: INTERNAL DOCUMENTS ON FERROMAGNETIC AND FERROELECTRIC CORES

To: Groups 62 and 63

From: William N. Papian

Date: January 18, 1952; Revised June 10, 1952; Revised November 26, 1952

Abstract: A listing of Reports, Engineering Notes, and Memoranda on various aspects of the ferromagnetic-core and ferroelectric-slab activity is presented.

	<u>Title</u>	<u>Date</u>	<u>Author</u>
<u>Reports</u>			
R-187	Digital Information Storage in Three Dimensions Using Magnetic Cores	5-16-50	J. W. Forrester
R-192	A Coincident-Current Magnetic Memory Unit (S.M. Thesis)	9-8-50	W. N. Papian
R-211	A Magnetic Matrix Switch and Its Incorporation Into A Coincident-Current Memory (S.M. Thesis)	6-6-52	K. H. Olsen
R-212	Ferroelectrics for Digital Information Storage and Switching (S.M. Thesis)	6-5-52	D. A. Buck
R-216	The 16-by-16 Metallic-Core Memory Array Model I	9-25-52	B. Widrowitz
R-217	Design of Low-Power Pulse Transformers Using Ferrite Cores (S.M. Thesis)	8-29-52	R. D. Robinson

	<u>Title</u>	<u>Date</u>	<u>Author</u>
<u>Theses</u> (Not in Report Form)			
1812	A Magnetic Flip-Flop	5-16-52	R.J. Pfaff
2045	An Investigation of Magnetic Core Stepping Registers for Digital Computers	8-22-52	R.C. Sims
 <u>Engineering Notes</u>			
E-406	Preliminary Tests on the Four-Core Magnetic Memory Array	6-18-51	W.N. Papian
E-413	Selection Systems for Magnetic Core Storage	8-7-51	R.R. Everett
E-422	Rectangular-Loop Magnetic Core Materials	9-4-51	W.N. Papian
E-438	Binary Counting with Magnetic Cores	12-6-51	D.A. Buck
E-454	A Non-Destructive Read System for Magnetic Cores	3-24-52	D.A. Buck
E-460	The Ferroelectric Switch	4-16-52	D.A. Buck
E-464	A Squareness Ratio for Coincident Current Memory Cores	7-16-52	D.R. Brown
E-470	Paper on Ferromagnetic & Ferroelectric Memory Devices	8-6-52	W.N. Papian
E-472	The Mirror: A Proposed Simplified Symbol for Magnetic Circuits	8-14-52	R.P. Mayer
E-475	A Magnetic Core Gate and Its Application in a Stepping Register	10-30-52	G.R. Briggs
E-477	Magnetic & Dielectric Amplifiers	8-28-52	D.A. Buck
E-488	Delta <sub>ns</sub> in Ceramic Array #1	10-14-52	E.A. Guditz
E-489	Oscilloscope Calibrator	10-15-52	Small (Smulowicz)
E-491	Hysteresis Loop Characteristics of MF-1118 for Different Temperatures	10-16-52	C. Morrison
E-495	Test Procedure for ferrite Pulse Transformers, 1	11-5-52	E.K. Gates

		<u>Date</u>	<u>Author</u>
<u>Engineering Notes (Continued)</u>			
E-496	Instructions and Specifications for the Manufacture of 3:1 and 1:1, 0.1 micro-second pulse Transformers on Ferrite Ring Cores	11-3-52	R. W. Hunt
E-500	Switch-Cores Analysis I	11-4-52	A. Katz & E. A. Guditz

APPROVED FOR PUBLIC RELEASE. CASE 06-1104.

Memorandum H-1377-3

Page 4 of 6

	<u>Title</u>	<u>Date</u>	<u>Author</u>
<u>Memoranda</u>			
* M-1369	Trip to General Ceramics January 9, 1952	1-11-52	D.A. Buck
M-1371	Magnetic Core Activity	1-15-52	W.N. Papiian
M-1381	Magnetic-Core Memory Matrix Analysis (Effect of Driver Impedance)	1-24-52	D.A. Buck
M-1490	Procedure for Receiving Magnetic Cores	5-16-52	D.R. Brown
M-1529	Conference on Magnetic Core Switching Phenomena	6-16-52	A. Katz
* M-1550	Trip to Magnetics, Inc. June 26, 1952	7-8-52	D.R. Brown
* M-1557	Trip Report of Visit to Bell Telephone Laboratories, IBM, Glence, NRL, Dr. Pulvari	7-17-52	D.A. Buck
M-1582	High-Speed Magnetic Pulse Control Circuits for Computers (Thesis Proposal)	8-6-52	H.K. Rising
M-1586	Trip to Magnetics, Inc.	8-8-52	D.R. Brown
M-1650	The Effect of Size of Metal Cores on Pulse and Hysteresis Measurements	9-25-52	R.F. Jenney
M-1664	Conference on Thin Evaporated Metal Films	10-6-52	A.L. Loeb
M-1676	Polishing Specimens of ferrites	10-14-52	F.E. Vinal
M-1681	Uniformity Tests on Ferrite Cores	10-21-52	J.H. McCusker
M-1691	Rectangular Hysteresis Loop Materials in a Non-Destructive Head System (B.S. Thesis Proposal)	10-20-52	W.A. Frank
M-1701	Rectangular Hysteresis Loop Materials in a Non-Destructive Read System (Thesis Progress Report)	Sept. and Oct. 1952	W.A. Frank
* M-1705	Visit of October 28, 1952 to Bell Telephone Laboratories, Murray Hill, N. J.	10-31-52	D.A. Buck

\* For Internal Distribution Only

APPROVED FOR PUBLIC RELEASE. CASE 06-1104.

Memorandum M-1377-3

Page 5 of 6

Title

Date

Author

Memoranda (Continued)


# APPROVED FOR PUBLIC RELEASE. CASE 06-1104.

Memorandum M-1377-3

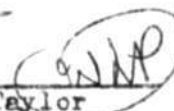
Page 6 of 6

<u>Title</u>	<u>Date</u>	<u>Author</u>
<u>Collections</u>		
Group 63 Seminars on Magnetism		A. L. Loeb & N. Menyuk
M-1673	10-8-52	
M-1675	10-9-52	
M-1679	10-18-52	
M-1687	10-27-52	
M-1688	10-28-52	
M-1689	10-27-52	
M-1697	10-28-52	
M-1700	10-27-52	
M-1708	11-3-52	
M-1714	11-10-52	
M-1718	11-12-52	

Signed

  
William N. Papien

Approved

NHT   
Norman H. Taylor

WNP/aik