

TX-0

Store Group

00	STO	AC → (y)
02	STX	AC → (y+XR)
04	SXA	XR ₅₋₁₇ → (y) ₅₋₁₇
06	ADO	(y) + 1 → AC, (y)
10	SLR	LR → (y)
12	SLX	LR → (y+XR)
14	STZ	0 → (y)
16		

Transfer Group

40	TRN	if AC ≤ -0: Jump y
42	TZE	if AC = ±0: Jump y
44	TSX	PC → XR, Jump y
46	TIX	if XR < -0: XR+1 → XR, Jump y if XR > +0: XR-1 → XR, Jump y
50	TRA	Jump y
52	TRX	Jump y+XR
54	TLV	ext. level = 0V: Jump y-
56		

Operate Orders

CLL	0 → AC _{0,8}
CLR	0 → AC _{9,17}
CLA	0 → AC
TAC	TAC v AC → AC
TBR	TBR v MBR → MBR
AMB	AC → MBR
LMB	LR → MBR
XMB	XR → MBR
MBL	MBR → LR
MBX	MBR → XR
SHR	Shift AC right
CYR	Cycle AC right
COM	~AC → AC
PAD	AC v MBR → AC
CRY	Add carries to complete PAD
ORL	MBR v LR → LR
ANL	MBR ^ LR → LR
ORB	AC v MBR → MBR
ANB	AC ^ MBR → MBR

Add/Load Group

20	ADD	(y) + AC → AC
22	ADX	(y+XR) + AC → AC
24	LDX	(y) _{0,5-17} → XR
26	AUX	(y) _{0,5-17} + XR → XR
30	LLR	(y) → LR
32	LLX	(y+XR) → LR
34	LDA	(y) → AC
36	LAX	(y+XR) → AC

Operate Group

6	OPR
7	

IO Orders

IOS	IO stop
HLT	Halt
PEN	Read Light pen
DIS	Display point
SEL	Select device
RPF	Read program flags
SPF	Set program flags
CPY	Copy LR to IO unit
R1L	Read 1 line
R3L	Read 3 lines
PRT	Print to Typewriter
TYP	Read LR from Typewriter
P6H	Punch (6 holes)
P7H	Punch (7 holes)

	000	001	010	011	100	101	110	111
00	STO	STX	SXA	ADO	SLR	SLX	STZ	
01	ADD	ADX	LDX	AUX	LLR	LLX	LDA	LAX
10	TRN	TZE	TSX	TIX	TRA	TRX	TLV	
11					OPR			

Operate Group until 1960

		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
CLL		1															
CLR	0.8		1														
IOS				1	0	x	x	x									
PEN	1.1									1						0	
TAC										0						1	
COM	1.2											1					
AMB																0	1
TBR																1	1
MBL	1.3								0	1							
LMB																1	0
ORL									0	0	1					1	1959
ANL									0	1	1					1	1959
SHR	1.4								1	0							
CYR									1	1							
PAD	1.7												1				
CRY														1			
HLT	1.8			1	1												

Operate Group after 1960

		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
AMB	0.7		1														
CLA	0.8	1															
XMB	1.2								0	1							
COM												1					
ORB	1.3															1	0
ANB																1	1
MBL	1.4								0	1							
LMB																0	1
PAD	1.5												1				
SHR	1.6								1	0	0						
CYR									1	1	0						
CRY	1.7													1			
MBX	1.8															0	1

	000	001	010	011	100	101	110	111
00	NOP	TAC	TBR	PEN	SEL		RPF	SPF
01	EXO	EX1	EX2	EX3	EX4	EX5	EX6	EX7
10	CPY	R1L	DIS	R3L	PRT	TYP	P6H	P7H
11	HLT	CLL	CLR					