RTX 2000/2001 Instruction Set

### PROP DUP {\text{NOT}} \text{ shift}	From subroutine	Subroutine Call Oaaa aaaa aaaa call a	ca aaaaaaaaaaaa		Long Literal 1101 000i xC	x0;x	1st cycle xxxx D SWAP	9 0/	2nd cycle {NOT} SWAP {NOT}	01					
### POPP (MOT) shift Memory Access 1st cycle More MOT) MOT		returr	r from subroutine			00 5 X X X	0		MAP OVER	alu			<u></u>	-	
WE DUP (NOT) shift	March Marc				1101 111 1101 cco	10 X				~			66666	register	
Fig. 80WP NOT) Shift 1111 1115 1000 1	Fig. SWIP NOT SHIFT 1115 000; xxxxx		{NOT}	. .	Memory A	SSOC	1st cv	vcle			2nd	ovele	00000	read/wrt	
Wigner W	May DROP (NOT) shift 1115 0000 000 × xxxxx 8 NWP 1000	OVER S	alu	. +	111s 000	×:00	Ø	Ь			ON}		00010	Stream	
Fig. 2017 State Continue	May BADP DIP SMAP DIP MAP SMAP DIP MAP		{NOT}	+	111s 1111	x:00	Ø	a			SWA		00011	8	
May PORP Line Lin	May Pin	DROP		+	111s ccc	x:00	Ŭ				SWA		00100	MD	
Way Ports North Strict 1115 analy 01:d dddd (SMAP BROP) 0 0 010 0 SMAP 0 SMAP 0 SMAP 0 SMAP 0 010 0 SMAP 0 010 0 SMAP 0 SMAP 0 SMAP 0 SMAP 0 SMAP 0 010 0 SMAP 0 SMAP 0 SMAP 0 010 0 SMAP	Way Port We Wort Way We We Way We We We Wort Wort Way We We We We We We We W		alu	+	111s 000 _l	01;x			B	0	NOP		00101	So	
WARPONE (NOT) STRIFT 1115 and policy SYMPA S	WARPORT WOT STRITT TITS and DO 10; X X XXX OFFE SWAP SWAP OFFE WOT STRITT WOT STRITT TITS and DO 10; X XXX OFFE SWAP SWAP OFFE WOT WOP WOT WOP WOT WOP WOT		DUP {NOT}	. ب	111s 111	01;d							00110	S S	
Fig. Cont. Strict Fig.	Fig.		{ NOI }		111s aaa _q	01; a		<u>~</u> ⁻		d SWAP al		-	00111	2 E	
Fig. 1 Fig. 2 Fig. 3 F	Fig. 1 Fig. 2 Fig. 2 Fig. 2 Fig. 2 Fig. 2 Fig. 3 F		alu	- +	1116 111	× ×							01000	NM C	
## Over all shift 1115 0000 111	## Over all shift that the shift tha	700 P. P. P		- +	1118 111	× ×		 			טרט בין מ		01001	מאיזפאפיז	
1115 111p 111g deded OVER SWAP SWAP OVER d SWAP alu NOP O1101 DPR	1115 1119 1113 deddd (OVER SWAP) 1 d m 1	OVER		- +	1115 000	, , ,			P OVER		NOP B		01010	IVB/SI B	
1115 aaap 11:0 dodd (OVER SWAP) SWAP OVER 0 SWAP alu NOP 01111 OPR	1115 aaap 11:d dddd (OVER SWAP) SWAP SWAP OVER ! d SWAP alu NOP 01101 DPR 1000		3		1118 111	1 d			, , ,		NOP		01100	IPR	
See Programmer's Ref. Manual S = 0 for word access(0/1), 1 for byte access (Ca/Cl) UFF U	See Programmer's Ref. Manual S = 0 for word access(a/i), 1 for byte access (Ca/C!) USARANCH SWAP DROP) and (OVER SWAP) are performed if p = 0 10000	,	:		111s aaa	11;d			P OVER !				01101	DPR	
S	SWAP DROP and (OVER SWAP) are performed if p = 0 10000 LSC 100000 LSC 100000 LSC 100000 LSC	See Pr	rogrammer's Ref. Man	ınal	Ć				-				01110	UPR	
1000 108 108 109	1000 1000				S = 0 {SWAP D	tor word ROP and	access(\alpha\!),	. "	oyte acce formed i	SS (Ca/C)	_		10000	CPR CPR	
10010 17m 10010 17m 10010 17m 10010 17m 10010 17m 10010 17m 17m 10010 17m 17m 10010 17m	10010 1001	2DUP G	JBRANCH			3			5				10001	UBR	
DROP NOT	Manual	OBRANC	.										10010	reserved	
Color Colo	Cab	BRANCH	т		2	000	finct ion		⊩-	no: +ou	0000	40:+00:1	10011		
GAD DROP (NOT)	Cab						2	<u> </u>	-#		2000		10101		
NOT	NOT NOR NOT NOR NOT	SS			00 10	001	AND			shift	1000	N2*	10110	;	
WOT WOT WAND WAND WOT WO	MOT				0011		NOR			٧.	1001	N2*c	10111	MHR	
Month Mont	Month Mont	0 0 0 0	•		0100	010	SWAP -			٠,٠	1010	D2*			
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1000	1000) 			0 1 1 2	=	CNAN	==		/20	1101	C022/		A 400 1	
{NOT} +c 0111 2/ 1111 D2/ 1 E11 {NOT} 1010 101 XOR -c 2 PSU {NOT} 1100 110 -c -c 8 PSV AP {NOT} -c 8 TC1 AP {NOT} -c 8 TC1 AP {NOT} -c 1	{NOT} +c 0111 2/ 1111 D2/ 1 111 D2/ 1 1 111 D2/ <td></td> <td>•</td> <td></td> <td>1000</td> <td>100</td> <td>+</td> <td></td> <td></td> <td></td> <td>1110</td> <td>(205)</td> <td></td> <td>_</td> <td>1100000</td>		•		1000	100	+				1110	(205)		_	1100000
{NOT} 1010 101 XNOR NOT 2 PSU {NOT} 1100 110 -c NOT 4 PSV alu -c NOT NOT NOT NOT alu CR L RID NOT NOT NOT NOT AP SWAP (NOT NOT	{NOT} 1010 101 XOR NOT 2 PSU {NOT} 1011 XNOR SNI 1000 110 - 4 PSV alu -c 1010 -c RSU RSU RSU RSU RSU alu 2nd cycle CR LL RID				1001	2	0+				1111	02/			1000000
{NOT} 1011 XNOR 3 RSU {NOT} - - 4 PSV alu - <t< td=""><td>{NOT} 1011 XNOR 1011 XNOR 4 PSV 4 PSV alu -c -c 1101 -c 1101 5 RSV 5 RSV 5 RSV 5 RSV 5 RSV 5 RSV 5 RSV 5 RSV 5 RSV 5 RSV 5 RSV 5 RSV 5 RSV 5 RSV 5 RSV 5 RSV 5 RSV 10 RSV 10 RSV 10 RSV 10 RSV 11 RSV <t< td=""><td></td><td></td><td></td><td>1010</td><td>101</td><td>XOR</td><td></td><td> </td><td></td><td></td><td></td><td></td><td>_</td><td>0100000</td></t<></td></t<>	{NOT} 1011 XNOR 1011 XNOR 4 PSV 4 PSV alu -c -c 1101 -c 1101 5 RSV 5 RSV 5 RSV 5 RSV 5 RSV 5 RSV 5 RSV 5 RSV 5 RSV 5 RSV 5 RSV 5 RSV 5 RSV 5 RSV 5 RSV 5 RSV 5 RSV 10 RSV 10 RSV 10 RSV 10 RSV 11 RSV <t< td=""><td></td><td></td><td></td><td>1010</td><td>101</td><td>XOR</td><td></td><td> </td><td></td><td></td><td></td><td></td><td>_</td><td>0100000</td></t<>				1010	101	XOR							_	0100000
1100 110	1100 110	d DROF			1011		XNOR							_	0000000
1101 -c -c 6 E12	1101 -c -c 6 E12 RSV R	0	{NOT}		1100	110		_						_	1100000
Single S	Second	d OVER			1101		o-								1000000
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2nd cycle CR 1L RID	2nd cycle CR 1L RID RID R TC2 AP \$WAP														0000000
2nd cycle CR IL RID	2nd cycle CR IL RID				L			-							1100000
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Revised: April 29, 1989

185 184 183 182 181 180 TC1 TC0 CYC RND DPS

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