

SC 20083

B1-11.1

Arctangent - Vector Resolution 1 - Format Controlled Decimal

0000	u0001'		delay
0001	h0033'		store x
0002	u0003'		delay
0003	h0032'		store x
0004	t0011'		xLo
0005	s0027'	2**-30	
0006	t0023'		x = 0
0007	a0029'	2**-30	
0008	r0105'		enter resolution routine
0009	u0049'		
0010	u0000'	exit	
0011	c0033'		reverse sign of x
0012	s0033'		
0013	r0105'		enter resolution routine
0014	u0049'		
0015	t0018'		angle in quad. IV
0016	s0038'	.5	move to quad. III
0017	u0010'		
0018	a0040'	.5	move to quad. II
0019	u0010'		
	,0000001'		
0020	q0000000'	.25	
0021	z0000'		
0022	z0000'		
0023	b0034'		pick up y
0024	t0041'		Ylo
0025	b0047'	.25	y greater than or equal 0; x = 0
0026	u0010'		answer is .25
	,0000014'		
0027	00000002'	2**-30	
0028	10000000'		.125
0029	00000002'		
0030	00000000'		
0031	00000002'		2**-30

0032	00000000'		
0033	00000000'		
0034	00000000'	input location for y	
0035	00000000'		
0036	00000000'		
0037	00000000'		
0038	40000000'		.5
0039	00000000'		
0040	40000000'		.5
0041	b0020'	.25	x = 0; y less than 0
0042	u0010'		answer is .25
	,0000005'		
0043	w0000000'	1.25	
0044	00000000'		
0045	00000000'		
0046	00000000'		
0047	20000000'		.25
0048	z0000'		
0049	c0035'	/x/	
0050	b0034'	y	
0051	t0106'		Ylo
0052	s0031'	2**30	
0053	t0025'		y = 0
0054	u0055'		delay
0055	a0027'	2**30	
0056	s0035'	/x/	
0057	t0112'		/y/less than/x/
0058	u0059'		delay
0059	s0031'	2**30	
0060	t0146'		/y/ = /x/
0061	b0033'	x	
0062	d0034'	y	
0063	r0216'		link to arctan

0100	u0151'		enter arctan routine
0101	c0037'		sign reversal
0102	s0037'		
0103	t0139'		
0104	s0047'	.25	
0105	u0000'		exit from resolution
0106	a0035'	/x/	
0107	t0061'		/x/less than/y/
0108	u0109'		delay
0109	s0031'	2**-30	
0110	t0118'		/y/ = /x/
0111	u0112'		delay
0112	b0034'	y	
0113	d0033'	x	
0114	r0216'		arctan routine
0115	u0151'		
0116	u0105'		
0117	z0000'		
0118	b0033'	x	
0119	t0137'		xlo
0120	u0121'		delay
0121	b0043'	.125	
0122	u0105'		
	,0000001'		
0123	10000000'		.125
0124	z0000'		
0125	c0145'		Acc. = 0
0126	u0105'		
0127	b0142'	.125	
0128	u0105'		
0129	z0000'		
0130	z0000'		
0131	z0000'		

	,0000005'		
0132	04103wq4'	C5	.0317458980
0133	00000000'		
0134	00000000'		
0135	00000000'		
0136	145w2w8f'	C1	.591548369
0137	b0123'	.125	
0138	u0105'		
0139	a0154'	.25	
0140	u0105'		
	,0000004'		
0141	w935j8w4'	C3	-.0530461134
0142	w0000000'	.125	
0143	wwqfkg78'	C15	.0006452234
0144	007202fj'	C13	.0034793226
0145	z0000'		
0146	u0147'		delay
0147	b0033'	x	
0148	t0127'		xlo
0149	b0028'	.125	
0150	u0105'		
0151	h0030'	Z	
0152	u0158'		delay
	,0000005'		
0153	wqkj6g5j'	C11	.0088983347
0154	20000000'	.25	
0155	01w6k948'	C9	.015345726
0156	00000000'		
0157	wk2ff4j8'	C7	-.0221361189
0158	m0030'	Z	form Z2
0159	h0145'	Z**2	
0160	u0161'		delay
0161	h0033'	Z**2	
0162	u0163'		delay
0163	h0035'	Z**2	

0200	m0143'	C15	
0201	a0144'	C13	
0202	m0145'	Z**2	
0203	a0153'	C11	
0204	m0033'	Z**2	
0205	a0155'	C9	
0206	m0035'	Z**2	
0207	a0157'	C7	
0208	u0209'		delay
0209	m0145'	Z**2	
0210	a0132'	C5	
0211	m0033'	Z**2	
0212	a0141'	C3	
0213	m0035'	Z**2	
0214	a0136'	C1	
0215	m0030'	Z	
0216	u0000'		exit from arctan