

OperationSine and Cosine Series

$$r = \sin b$$

or

$$r = \cos b$$

SS

Use

a) Calling Linkage

L	:	100	8	[L + 2]	[36f]	[35f]	
L + 1:		—	5	[—]	[—]	[SCR: 1]	cos
L + 2:		0	ε	[]	b []	r []	sin

b) Adaptation Link Word

L + 2: 44 JWL 42 β

c) Storage

j = 44 wordsk = 42 orders2 constants7 opstos: 359 to 35fRequirements and Performancea) Method of operation Floating point, series expansionb) Additional routines required Nonec) Range and form of variable b, in radians, must be real and normalized ranging in positive or negative values from $2^{-255} \leq |b| \leq 2^{-275}$ or $b = 0$.d) Accuracy The accuracy is within the low order three bits of the significant number or $\frac{1}{2}(\epsilon \times \sin b)$ where ϵ is a floating point number.e) Performance time average 2.67 seconds
maximum 3.46 secondsNote use address of ϵ read as 36f