

Sin and Cos

	Integer	Fractional
target-angle	16 bits from MSB	last 4 bits from right
x-res, y-res	4 bits from MSB	16 bits from LSB

$\tan^{-1}(x)$

	Integer	Fractional
y-input, z-res	16 bits from MSB	4 bits from LSB

→ For this, the x value is initialized as '1' with 16 bits for integer part and 4 bits for fractional part. Hence y also needs to be given in the same format.

→ z -res depends on how the look up table is designed. The look up table in the code is designed to have 16 bits for the integer part and 4 bits for the fractional part. Hence we follow the same precision for the result.

tanh inverse