p = bit probability error

Prob of zero errors

$(1-p)^4$

Prob of exactly one

$\binom{4}{1} p(1-p)^3$

Prob of upto 1 being 99.6%

$(1-p)^4 + 4p(1-p)^3 = 0.996$

Let $y = 1-p$

$y^4 + 4(1-y)y^3 = 0.996$

$4y^3 - 3y^4 - 0.996 = 0$

Solving for y

$y = 1.02, y = 0.97$

$p = 1 - 0.97$