

dividend:- $f_1 = e_0 e_2 + a c + a + b c + b + c$.

h_4 :- $e_0 e_2 + e_2 + 1$

f_3 :- $e_2 + c + 1$

f_2 :- $e_1 + b c + b + c$

f_1 :- $e_0 + a + b$

order:- of division:-

$h_4 \rightarrow f_3 \rightarrow f_2 \rightarrow f_1$

variable order = $\{e_2, e_1, e_0, a, b, c\}$

$f_1 \xrightarrow{h_4} [1] (e_0 e_2 + e_2 + 1) + \{e_2 + a c + a + b c + b + c\} \Rightarrow f_2$

$f_1 \xrightarrow{f_3} [1] (e_2 + c + 1) + \{a c + a + b c + b\} \Rightarrow f_2$

f_2 is in terms of primary inputs only and we don't have any divisors with primary inputs as leading terms.

$f_1 = [1] (e_0 e_2 + e_2 + 1) + [1] (e_2 + c + 1) + \{a c + a + b c + b\}$