Rank-140 over GF(2)

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The equation

The equation of the surface is :

$$X_0^3 + X_1^3 + X_2^3 + X_3^3 + X_0^2X_1 + X_0^2X_2 + X_0^2X_3 = 0$$

(1, 1, 1, 1, 1, 1, 1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0)
The point rank of the equation over GF(2) is 140

General information

Number of lines	0
Number of points	3
Number of singular points	0
Number of Eckardt points	0
Number of double points	0
Number of single points	0
Number of points off lines	3
Number of Hesse planes	0
Number of axes	0
Type of points on lines	
Type of lines on points	0^3

Singular Points

The surface has 0 singular points:

The 0 Lines

The lines and their Pluecker coordinates are:
Rank of lines: ( )
Rank of points on Klein quadric: ( )

Eckardt Points

The surface has 0 Eckardt points:

Double Points

The surface has 0 Double points:
The double points on the surface are:

Single Points

The surface has 0 single points:
The single points on the surface are:

The single points on the surface are:

Points on surface but on no line

The surface has 3 points not on any line:
The points on the surface but not on lines are:

$0: P_7 = (0,1,1,0)$ $\quad$ $2: P_{12} = (0,0,1,1)$
$1: P_{10} = (0,1,0,1)$

Line Intersection Graph

Neighbor sets in the line intersection graph:
The surface has 3 points:
The points on the surface are:

$0: P_7 = (0,1,1,0)$ $\quad$ $2: P_{12} = (0,0,1,1)$
$1: P_{10} = (0,1,0,1)$