Rank-65858 over GF(2)

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The equation

The equation of the surface is :

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

(1, 1, 1, 1, 1, 1, 0, 0, 1, 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0)
The point rank of the equation over GF(2) is 65858

General information

Number of lines	0
Number of points	7
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	7
Number of Hesse planes	0
Number of axes	0
Type of points on lines	
Type of lines on points	0^7

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

$0 : P_4 = (1, 1, 1, 1)$ $4 : P_{12} = (0, 0, 1, 1)$
$1 : P_9 = (1, 0, 0, 1)$ $5 : P_{13} = (1, 0, 1, 1)$
$2 : P_{10} = (0, 1, 0, 1)$ $6 : P_{14} = (0, 1, 1, 1)$
$3 : P_{11} = (1, 1, 0, 1)$

Line Intersection Graph

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Neighbor sets in the line intersection graph:
The surface has 7 points:
The points on the surface are:

$0 : P_4 = (1, 1, 1, 1)$ $3 : P_{11} = (1, 1, 0, 1)$ $6 : P_{14} = (0, 1, 1, 1)$
$1 : P_9 = (1, 0, 0, 1)$ $4 : P_{12} = (0, 0, 1, 1)$
$2 : P_{10} = (0, 1, 0, 1)$ $5 : P_{13} = (1, 0, 1, 1)$