Reif

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Variables: $x[16]$

Equations:

$x_4x_{13} + x_5x_{14} + x_6(1 - x_{13} - x_{14})$;
$x_4x_{15} + x_5x_{16} - x_6(x_{15} + x_{16})$;
$x_7x_{13} + x_8x_{14} + x_9(1 - x_{13} - x_{14})$;
$x_7x_{15} + x_8x_{16} - x_9(x_{15} + x_{16}) - 1$;
$x_{10}x_{13} + x_{11}x_{14} + x_{12}(1 - x_{13} - x_{14})$;
$x_{10}x_{15} + x_{11}x_{16} - x_{12}(x_{15} + x_{16})$;
$x_1x_{13} + x_2x_{14} + x_3(1 - x_{13} - x_{14})$;
$x_1x_{15} + x_2x_{16} - x_3(x_{15} + x_{16})$;
$x_1x_4x_{13} + x_2x_5x_{14} + x_3x_6(1 - x_{13} - x_{14}) - 1$;
$x_1x_4x_{15} + x_2x_5x_{16} - x_3x_6(x_{15} + x_{16})$;
$x_1x_7x_{13} + x_2x_8x_{14} + x_3x_9(1 - x_{13} - x_{14})$;
$x_1x_7x_{15} + x_2x_8x_{16} - x_3x_9(x_{15} + x_{16})$;
$x_1x_{10}x_{13} + x_2x_{11}x_{14} + x_3x_{12}(1 - x_{13} - x_{14})$;
$x_1x_{10}x_{15} + x_2x_{11}x_{16} - x_3x_{12}(x_{15} + x_{16}) - 1$;

This polynomial system of equations has no solutions.

References

[1] D. Bini and B. Mourrain. Polynomials test suite. 1996.