

Known switching classes of APN functions in \mathbb{F}_{2^6}

No.	$F(x)$
1.1	x^3
1.2	$x^3 + u^{11}x^6 + ux^9$
2.1	$ux^5 + x^9 + u^4x^{17} + ux^{18} + u^4x^{20} + ux^{24} + u^4x^{34} + ux^{40}$
2.2	$u^7x^3 + x^5 + u^3x^9 + u^4x^{10} + x^{17} + u^6x^{18}$
2.3	$x^3 + ux^{24} + x^{10}$
2.4	$x^3 + u^{17}(x^{17} + x^{18} + x^{20} + x^{24})$
2.5	$x^3 + u^{11}x^5 + u^{13}x^9 + x^{17} + u^{11}x^{33} + x^{48}$
2.6	$u^{25}x^5 + x^9 + u^{38}x^{12} + u^{25}x^{18} + u^{25}x^{36}$
2.7	$u^{40}x^5 + u^{10}x^6 + u^{62}x^{20} + u^{35}x^{33} + u^{15}x^{34} + u^{29}x^{48}$
2.8	$u^{34}x^6 + u^{52}x^9 + u^{48}x^{12} + u^6x^{20} + u^9x^{33} + u^{23}x^{34} + u^{25}x^{40}$
2.9	$x^9 + u^4(x^{10} + x^{18}) + u^9(x^{12} + x^{20} + x^{40})$
2.10	$u^{52}x^3 + u^{47}x^5 + ux^6 + u^9x^9 + u^{44}x^{12} + u^{47}x^{33} + u^{10}x^{34} + u^{33}x^{40}$
2.11	$u(x^6 + x^{10} + x^{24} + x^{33}) + x^9 + u^4x^{17}$
2.12	$x^3 + u^{17}(x^{17} + x^{18} + x^{20} + x^{24}) + u^{14}((u^{52}x^3 + u^6x^5 + u^{19}x^7 + u^{28}x^{11} + u^2x^{13}) + (u^{52}x^3 + u^6x^5 + u^{19}x^7 + u^{28}x^{11} + u^2x^{13})^2 + (u^{52}x^3 + u^6x^5 + u^{19}x^7 + u^{28}x^{11} + u^2x^{13})^4 + (u^{52}x^3 + u^6x^5 + u^{19}x^7 + u^{28}x^{11} + u^2x^{13})^8 + (u^{52}x^3 + u^6x^5 + u^{19}x^7 + u^{28}x^{11} + u^2x^{13})^{16} + (u^{52}x^3 + u^6x^5 + u^{19}x^7 + u^{28}x^{11} + u^2x^{13})^{32} + (u^2x)^9 + (u^2x)^{18} + (u^2x)^{36} + x^{21} + x^{42})$