

Channel	Year	L1 Trigger	HLT Trigger
MET	2016	$p_{T,L1}^{\text{miss}} > 110 \text{ or } 120 \text{ GeV}$	$p_T^{\text{miss}} > 170 \text{ GeV}$
	2017/2018	$p_{T,L1}^{\text{miss}} > 120 \text{ GeV}$	$p_T^{\text{miss}} > 180 \text{ GeV}$
1 electron	2016	$E_{T,L1} > 27 \text{ GeV}$	$p_T(e) > 32 \text{ GeV}$
	2017/2018	$E_{T,L1} > 30 \text{ GeV}$	$p_T(e) > 35 \text{ GeV}$
1 muon	2016	$p_{TL1}(\mu) > 22 \text{ GeV}$	$p_T(\mu) > 24 \text{ GeV}$
	2017/2018	$p_{TL1}(\mu) > 25 \text{ GeV}$	$p_T(\mu) > 27 \text{ GeV}$
2 electrons	2016–2018	$E_{T,L1}(1) > 22 \text{ and } E_{T,L1}(2) > 10 \text{ GeV}$	$p_T(e_1) > 22 \text{ GeV and } p_T(e_2) > 10 \text{ GeV}$
2 muons	2016–2018	$p_{TL1}(\mu_1) > 15 \text{ and } p_{TL1}(\mu_2) > 8 \text{ GeV}$	$p_T(\mu_1) > 17 \text{ and } p_T(\mu_2) > 8 \text{ GeV}$
		Four $E_{T,L1} > 50 \text{ GeV}$ or $H_T > 280 \text{ GeV}$	Four jets with $p_T > 45 \text{ GeV}$
FH	2016	Two $E_{T,L1} > 100 \text{ GeV}$ or one $E_{T,L1} > 200 \text{ GeV}$	Two jets with $p_T > 100 \text{ GeV}$ with $\Delta\eta_{1,2} < 1.6$
		Two $E_{T,L1} > 100 \text{ GeV}$ or one $E_{T,L1} > 170 \text{ GeV}$ or $H_T > 280 \text{ GeV}$	Two jets with $p_T > 90 \text{ GeV}$ and two jets with $p_T > 30 \text{ GeV}$
		Four $E_{T,L1} > 60 \text{ GeV}$ or $H_T > 380 \text{ GeV}$ or $E_{T,L1,1} > 70 \text{ GeV}, E_{T,L1,2} > 55 \text{ GeV}, E_{T,L1,3} > 40 \text{ GeV},$ $E_{T,L1,4} > 35 \text{ GeV}$ and $H_{TT,L1} > 280 \text{ GeV}$	Four jets with $p_{T1} > 75 \text{ GeV},$ $p_{T3} > 45 \text{ GeV}, p_{T4} > 40 \text{ GeV},$ and $H_T > 300 \text{ GeV}$
	2017	Two $E_{T,L1} > 100 \text{ GeV}$ with $\Delta\eta_{1,2} < 1.6$	Two jets with $p_T > 100 \text{ GeV}$ with $\Delta\eta_{1,2} < 1.6$
		Four $E_{T,L1} > 60 \text{ GeV}$ or $H_T > 380 \text{ GeV}$ or $E_{T,L1,1} > 70 \text{ GeV}, E_{T,L1,2} > 55 \text{ GeV}, E_{T,L1,3} > 40 \text{ GeV},$ $E_{T,L1,4} > 40 \text{ GeV}$ and $H_{TL1} > 320 \text{ GeV}$	Four jets with $p_{T1} > 75 \text{ GeV}, p_{T2} > 60 \text{ GeV},$ $p_{T3} > 45 \text{ GeV}, p_{T4} > 40 \text{ GeV},$ and $H_T > 330 \text{ GeV}$
	2018	Two $E_{T,L1} > 112 \text{ GeV}$ with $\Delta\eta_{1,2} < 1.6$ or two $E_{T,L1} > 150 \text{ GeV}$	Two jets with $p_T > 116 \text{ GeV}$ with $\Delta\eta_{1,2} < 1.6$