



Go to the ArduPilot website, click on the "Build" button, and click on the "Build" button. This will take you to the ArduPilot build server. The build server will ask you to select the vehicle, version, and board, in that order, for which you want to build the firmware. The build server will also ask you to select the features you wish to include in the firmware. The build server will then build the firmware for you. The build server will then download the firmware to your computer. The build server will then upload the firmware to the board. The build server will then reboot the board. The build server will then return to the ArduPilot website.



1. Click on the "Build" button:

1. Click on the "Build" button located at the top right corner of the homepage.

“[../..../images/custom-firmware-build-server-addbuild.png](#)”

2. Choose the vehicle, version, and board, in that order, for which you want to build the firmware.

“[../..../images/custom-firmware-build-server.png](#)”

3. Select the features you wish to include in the firmware

- “
- The default features for the board/vehicle will automatically be selected
 - Some features depend on other features so when a feature is selected, all its dependencies will be automatically selected but if the feature is later deselected, the dependencies are not automatically deselected
 - It is possible to select a set of features that will not fit on a board which will cause the build will fail.

4. Click the '**Generate**' button. You will be redirected to the homepage, and a build log for the request you just submitted will appear.
5. Once the build is complete the build artifact will be downloaded automatically, You can also download it manually by clicking the '**Download**' button next to your build request in the build list table. The button will be enabled only after a successful build.
6. Extract the downloaded build artifact. The extracted files will include the .apj firmware file along with other files
7. Use your GCS to install the .apj file onto your autopilot. If using Mission Planner, open the Install Firmware and click then "Load custom firmware" link

“ [../../images/mission-planner-load-custom-firmware.png](#) ”

Versions

Latest

This is the current development branch of ArduPilot. It includes new features, enhancements, clean-ups, etc. but has not been through a release cycle of beta testing. It has been alpha tested and thoroughly tested in ArduPilot's Continuous Integration auto-test suite. Many experienced users select this to get the latest features but it has the highest risk, in terms of potential bugs.

Beta

This is a release of the development branch used for widespread testing and feedback. While the risk of major issues is low, it is expected that minor behavioral deviations may pop up. These are normally addressed in later beta releases of a major new release before declaring the code as a stable release.

Stable

These are fully released versions of the code. There are usually several minor releases for each major release number which correct any anomalies found during the beta testing phases. These releases, have the lowest risk. It is recommended that the highest numbered major/minor release be used in a given release sequence, unless an older version is needed.



The ArduPilot project is very careful about what is merged into our "point releases". Anything that goes into one has either been evaluated as being strictly limited in what impact it can have on existing systems, or as being an important bugfix. We encourage users to upgrade to any point release which is released, as they sometimes contain very important bugfixes.

Guide to Size Impacts

Often, the custom build server is used to create firmware with features that have been removed in the standard firmware to conserve flash space, but desired by the user. If a build fails to complete due to lack of flash, the user may remove features/sensors that are not needed in order to make room for those additional items wanted. In order to facilitate those choices, the table below shows what impact a feature's removal has on flash size. Note that a removed feature in this list automatically removed all features dependent upon it.



the exact numbers of bytes will change slightly over time due to code changes, but this table should be accurate enough to make decisions on removal candidates to gain flash space.

FEATURE	PLANE	COPTER	ROVER
AP_SCRIPTING_ENABLED	175800	182160	171688
HAL_NAVEKF3_AVAILABLE	171392	171400	170784
HAL_QUADPLANE_ENABLED	139776	na	na
HAL_ENABLE_DRONECAN_D RIVERS	97480	96120	95936
HAL_LOGGING_ENABLED	88792	95704	86400
HAL_MOUNT_ENABLED	67268	67300	67116
AP_RANGEFINDER_ENABLE D	46568	48056	46272
HAL_GYROFFT_ENABLED	42396	42308	41772
OSD_ENABLED	40992	40568	40472
AP_RCPROTOCOL_ENABLED	35888	35888	35904

FEATURE	PLANE	COPTER	ROVER
AP_FILESYSTEM_ROMFS_ENABLED	32920	32912	32912
HAL_MSP_ENABLED	31848	31808	31816
AP_BOOTLOADER_FLASHING_ENABLED	31648	31648	31640
AP_OPTICALFLOW_ENABLED	29232	33816	29216
HAL_EXTERNAL_AHRS_ENABLED	29120	29112	29008
HAL_ADSB_ENABLED	25760	25800	19112
AP_AIRSPEED_ENABLED	25440	22984	23468
AP_CAMERA_ENABLED	25192	25192	25192
AP_FRSKY_TELEM_ENABLED	24504	24288	24376
AP_FRSKY_SPORT_TELEM_ENABLED	22088	21952	22040
AP_FRSKY_SPORT_PASSTHROUGH_ENABLED	18376	18240	18328
HAL_WITH_MSP_DISPLAYPORT	18328	18248	18240
AP_FENCE_ENABLED	17488	50360	44748
HAL_SOLO_GIMBAL_ENABLED	17432	17192	17424
HAL_EFI_ENABLED	14724	14816	14784
COMPASS_CAL_ENABLED	14624	14592	14600
EK3_FEATURE_OPTFLOW_FUSION	12824	12816	12832
AP_GPS_UBLOX_ENABLED	12504	12368	12440
AP_RCPROTOCOL_CRSF_ENABLED	11648	11640	11648
AP_BARO_PROBE_EXTERNAL_I2C_BUSES	11296	11296	11296
OSD_PARAM_ENABLED	11116	11596	8152
HAL_VISUALODOM_ENABLED	10616	10520	10648
AP_EXTERNAL_AHRS_INERTIALABS_ENABLED	10328	10344	10224
HAL_CRSF_TELEM_ENABLED	9680	9680	9680

FEATURE	PLANE	COPTER	ROVER
AP_RPM_ENABLED	9616	5504	5648
HAL_MOUNT_XACTI_ENABLED	8984	8968	8976
AP_VIDEOTX_ENABLED	8956	9036	9060
HAL_PICCOLO_CAN_ENABLED	8920	8920	8920
AP_BEACON_ENABLED	8840	14424	14440
AP_RCPROTOCOL_SRX12_ENABLED	8592	8584	8584
HAL_GENERATOR_ENABLED	8424	8544	8416
HAL_ADSB_SAGETECH_MXS_ENABLED	8376	8376	8592
HAL_INS_TEMPERATURE_CALC_ENABLE	7952	8040	8000
AC_PRECLAND_ENABLED	7832	10144	8968
HAL_SOARING_ENABLED	7656	na	na
HAL_PROXIMITY_ENABLED	7272	26824	25472
HAL_MOUNT_TOPOTEK_ENABLED	7092	7092	7092
AP_INERTIALSENSOR_HARMONICNOTCH_ENABLED	6368	9824	5128
AP_GPS_NMEA_ENABLED	6176	6176	6184
HAL_MOUNT_SIIYI_ENABLED	6000	5992	5992
HAL_LANDING_DEEPSTALL_ENABLED	5712	120	120
AP_CAMERA_RUNCAM_ENABLED	5616	5600	5592
AP_OPTICALFLOW_PIXART_ENABLED	5536	5536	5536
AP_SERVO_TELEM_ENABLED	5520	4864	5344
GPS_MOVING_BASELINE	5096	5040	5088
AP_NOTIFY_TONEALARM_ENABLED	4992	4984	4984
EK3_FEATURE_DRAG_FUSION	4984	4984	4984
AP_GPS_SBF_ENABLED	4904	4904	4904

FEATURE	PLANE	COPTER	ROVER
AP_EXTERNAL_AHRS_VECT ORNAV_ENABLED	4824	4816	4832
HAL_MOUNT_VIEWPRO_ENA BLED	4812	4812	4804
AP_GPS_SBP_ENABLED	4792	4864	4880
AP_MAVLINK_FTP_ENABLED	4656	4648	4648
AP_CRASHDUMP_ENABLED	4652	4636	4644
AP_ICENGINE_ENABLED	4600	144	144
HAL_SPEKTRUM_TELEM_EN ABLED	4576	4576	4576
AP_RELAY_ENABLED	4464	4376	4528
AP_SERIALMANAGER_REGIS TER_ENABLED	4376	4448	4456
AP_PROXIMITY_DRONECAN_ ENABLED	4248	2024	2024
HAL_DISPLAY_ENABLED	4176	4168	4168
AP_BATTERY_SMBUS_ENAB LED	4172	4172	4172
AP_RANGEFINDER_VL53L1X _ENABLED	4160	4152	4152
AP_QUICKTUNE_ENABLED	4136	na	na
AP_TUNING_ENABLED	4072	na	na
AP_ADVANCEDFAILSAFE_EN ABLED	4032	472	472
AP_CAN_SLCAN_ENABLED	4016	4096	4032
AP_RCPROTOCOL_GHST_EN ABLED	3680	3672	3672
HAL_WITH_FRSKY_TELEM_BI DIRECTIONAL	3632	3496	3592
AP_CAMERA_INFO_FROM_S CRIPT_ENABLED	3480	3480	3480
HAL_ADSB_UCP_ENABLED	3424	3416	3416
AP_FETTEC_ONEWIRE_ENAB LED	3312	3296	3248
EK3_FEATURE_EXTERNAL_N AV	3272	3272	3272

FEATURE	PLANE	COPTER	ROVER
AP_FILESYSTEM_PARAM_ENABLED	3208	3208	3208
AP_RANGEFINDER_VL53L0X_ENABLED	3200	3200	3200
AP_SMARTAUDIO_ENABLED	3160	3144	3144
AP_GPS_BLENDED_ENABLE	3096	3096	3096
HAL_MSP_OPTICALFLOW_ENABLED	2944	2952	2952
AP_COMPASS_DRONECAN_ENABLED	2872	2872	2872
HAL_MSP_RANGEFINDER_ENABLED	2856	2864	2864
AP_DRONECAN_SERIAL_ENABLED	2800	2800	2800
AP_DRONECAN_HOBBYWING_ESC_SUPPORT	2792	2792	2792
HAL_RALLY_ENABLED	2768	2848	3016
AP_COMPASS_BMM350_ENABLED	2656	2656	2656
AP_FOLLOW_ENABLED	2608	4448	3928
AP_FILESYSTEM_SYS_ENABLED	2576	2576	2568
MODE_AUTOLAND_ENABLED	2488	na	na
HAL_ADSB_SAGETECH_ENABLED	2472	2464	2464
AP_AIRSPEED_DRONECAN_ENABLED	2456	2456	2456
AP_COMPASS_HMC5843_ENABLED	2456	2448	2448
AP_GENERATOR_IE_2400_ENABLED	2392	2392	2392
AP_DRONECAN_SEND_GPS	2360	2352	2352
AP_EXTERNAL_AHRS_MICROSTRAIN7_ENABLED	2336	2336	2336
AP_GPS_SBP2_ENABLED	2320	2376	2440

FEATURE	PLANE	COPTER	ROVER
AP_RANGEFINDER_LWI2C_ENABLED	2320	2320	2320
AP_GHST_TELEM_ENABLED	2304	2304	2304
AP_BATTERY_INA2XX_ENABLED	2288	2280	2280
HAL_MSP_SENSORS_ENABLED	2288	2288	2288
AP_AIRSPEED_MSP_ENABLED	2272	2272	2272
AP_BARO_MSP_ENABLED	2272	2280	2280
AP_COMPASS_MSP_ENABLED	2272	2280	2280
HAL_MSP_GPS_ENABLED	2272	2280	2280
AP_PLANE_OFFBOARD_GUIDED_SLEW_ENABLED	2264	na	na
AP_AIRSPEED_SDP3X_ENABLED	2256	2248	2256
AP_FILESYSTEM_MISSION_ENABLED	2200	2200	2200
AP_GPS_GSOFF_ENABLED	2192	2184	2184
AP_FILTER_ENABLED	2168	2128	2136
AP_GENERATOR_RICHENPOWER_ENABLED	2168	2248	2168
AP_GENERATOR_LOWEHEISER_ENABLED	4108	4104	4124
HAL_HIGH_LATENCY2_ENABLED	2168	2024	1920
AP_COMPASS_LIS3MDL_ENABLED	2128	2128	2128
AP_COMPASS_MMC3416_ENABLED	2120	2112	2112
AP_BARO_DRONECAN_ENABLED	2080	2080	2080
AP_INERTIALSENSOR_BATC HSAMPLER_ENABLED	2064	2072	2056
AP_GPS_NMEA_UNICORE_ENABLED	2008	2000	2000

FEATURE	PLANE	COPTER	ROVER
AP_COMPASS_CALIBRATION_FIXED_YAW_ENABLED	1976	1976	1976
HAL_BUTTON_ENABLED	1960	1984	2072
AP_EFI_SERIAL_MS_ENABLE D	1944	1936	1936
AP_ROBOTISSERVO_ENABL ED	1936	1872	1960
HAL_PARACHUTE_ENABLED	1912	1824	616
HAL_MOUNT_SERVO_ENABL ED	1880	1688	1688
AP_LANDINGGEAR_ENABLE D	1824	1360	na
AP_EFI_DRONECAN_ENABLE D	1752	1752	1752
AP_VOLZ_ENABLED	1752	2048	1840
AP_EXTERNAL_AHRS_MICRO STRAIN5_ENABLED	1744	1736	1736
AP_SERVORELAYEVENTS_E NABLED	1696	1712	1712
AP_EFI_CURRAWONG_ECU_ ENABLED	1680	1672	1672
AP_RSSI_ENABLED	1672	1728	1808
AP_COMPASS_IST8310_ENA BLED	1656	1656	1656
AP_EFI_SERIAL_HIRTH_ENAB LED	1656	1688	1648
AP_AIRSPEED_MS4525_ENA BLED	1648	1640	1640
AP_BARO_BMP085_ENABLE D	1648	1648	1648
AP_RANGEFINDER_WASP_E NABLED	1648	1640	1640
AP_GRIPPER_ENABLED	1644	2068	1756
HAL_NMEA_OUTPUT_ENABL ED	1632	1688	1688
AP_SDCARD_STORAGE_ENA BLED	1624	1480	1488
AP_GPS_ERB_ENABLED	1616	1480	1552

FEATURE	PLANE	COPTER	ROVER
AP_AIRSPEED_MS5525_ENABLED	1600	1600	1584
AP_BARO_DPS280_ENABLED	1600	1592	1592
AP_BARO_SPL06_ENABLED	1600	1592	1592
AP_COMPASS_BMM150_ENABLED	1600	1592	1592
AP_TRAMP_ENABLED	1584	1600	1568
AP_COMPASS_RM3100_ENABLED	1568	1560	1560
AP_TEMPERATURE_SENSOR_ENABLED	1560	1560	1552
HAL_MOUNT_GREMSY_ENABLED	1560	1560	1560
AP_AIRSPEED_AUAV_ENABLED	1544	1544	1528
AP_MOTORS_FRAME_QUAD_ENABLED	1544	1376	na
AP_CAMERA_MAVLINKCAMV2_ENABLED	1512	1512	1512
AP_GPS_NOVA_ENABLED	1512	1512	1512
AP_RANGEFINDER_BENEWAKE_TFMINIPLUS_ENABLED	1472	1472	1472
HAL_MOUNT_ALEXMOS_ENABLED	1472	1464	1464
AP_RC_CHANNEL_AUX_FUNCTION_STRINGS_ENABLED	1464	1456	1456
AP_COMPASS_IST8308_ENABLED	1424	1416	1416
AP_BARO_FBM320_ENABLED	1392	1392	1392
AP_KDECAN_ENABLED	1392	1248	1264
AP_SCRIPTING_SERIALDEVICE_ENABLED	1376	1352	1336
AP_RANGEFINDER_DRONECAN_ENABLED	1360	1360	1360
AP_DRONECAN_HIMARK_SERVO_SUPPORT	1352	1344	1344

FEATURE	PLANE	COPTER	ROVER
AP_BARO_BMP388_ENABLED	1320	1320	1320
AP_BARO_BMP280_ENABLED	1312	1304	1304
AP_COMPASS_QMC5883L_ENABLED	1312	1304	1304
AP_MOTORS_FRAME_OCTA_ENABLED	1312	1312	na
AP_RPM_PIN_ENABLED	1248	1552	1552
AP_CUSTOMROTATIONS_ENABLED	1216	1232	1216
AP_OPTICALFLOW_HEREFLOW_ENABLED	1168	1160	1160
HAL_MOUNT_STORM32SERIAL_ENABLED	1156	1148	1148
AP_FRSKY_D_TELEM_ENABLED	1144	1136	1136
HAL_CRSF_TELEM_TEXT_SELECTION_ENABLED	1120	1120	1120
AC_PRECLAND_IRLOCK_ENABLED	1112	1112	1112
AP_GPS_SIRF_ENABLED	1104	968	1048
AP_BARO_LPS2XH_ENABLED	1040	1040	1040
AP_RANGEFINDER_PULSEDLIGHTLRF_ENABLED	1024	1024	1024
AP_RANGEFINDER_JRE_SERIAL_ENABLED	1016	1008	1008
HAL_ADSB_UAVIONIX_MAVLINK_ENABLED	992	984	984
AP_RPM_DRONECAN_ENABLED	984	984	984
AP_AIRSPEED_DLVR_ENABLED	976	976	976
AP_RANGEFINDER_TRI2C_ENABLED	968	968	968
HAL_PLUSCODE_ENABLE	960	944	944
AP_EXTENDED_ESC_TELEM_ENABLED	944	936	928

FEATURE	PLANE	COPTER	ROVER
AP_RANGEFINDER_BLPING_ENABLED	936	936	936
AP_RANGEFINDER_NMEA_ENABLED	936	928	880
AP_MOTORS_FRAME_OCTA_QUAD_ENABLED	896	896	na
AP_CAMERA_SOLOGIMBAL_ENABLED	888	888	888
AP_RCPROTOCOL_SRXL_ENABLED	888	888	888
AP_CAMERA_MOUNT_ENABLED	880	872	872
HAL_MOUNT_CADDX_ENABLED	880	872	872
AP_AIRSPEED_ASP5033_ENABLED	856	856	856
HAL_OSD_SIDEBAR_ENABLE	848	848	848
AP_RANGEFINDER_LIGHTWARE_SERIAL_ENABLED	832	832	832
AP_EFI_NWPWU_ENABLED	824	816	816
AP_NOTIFY_MAVLINK_LED_CONTROL_SUPPORT_ENABLED	824	824	824
AP_RANGEFINDER_TOFSENSEF_I2C_ENABLED	824	824	824
HAL_MOUNT_STORM32MAVLINK_ENABLED	824	824	824
AP_MAVLINK_MSG_DEVICE_OP_ENABLED	816	816	816
AP_OPTICALFLOW_PX4FLOW_ENABLED	816	808	808
AP_RANGEFINDER_PWM_ENABLED	808	800	800
AP_BARO_EXTERNALAHRSENABLED	792	792	800
AP_RANGEFINDER_LEDDAR_VU8_ENABLED	776	776	776
AP_NOTIFY_NCP5623_ENABLED	768	760	760

FEATURE	PLANE	COPTER	ROVER
AP_OPTICALFLOW_CXOF_ENABLED	768	760	760
AP_RANGEFINDER_RDS02UF_ENABLED	768	760	760
AP_MAVLINK_MSG_SERIAL_CONTROL_ENABLED	760	760	760
AP_CAMERA_SEND_FOV_STATUS_ENABLED	752	752	752
AP_BARO_BMP581_ENABLED	736	736	736
AP_MAVLINK_MSG_FLIGHT_INFORMATION_ENABLED	728	720	752
AP_OPTICALFLOW_UPFLOW_ENABLED	728	728	728
HAL_BARO_WIND_COMP_ENABLED	712	680	728
AP_EFI_SERIAL_LUTAN_ENABLED	704	704	704
AP_GPS_MAV_ENABLED	704	704	704
AP_MOTORS_FRAME_Y6_ENABLED	704	704	na
AP_RCPROTOCOL_ST24_ENABLED	704	704	704
AP_BATTERY_FUELFLOW_ENABLED	696	696	696
AP_RANGEFINDER_MAXSONARI2CXL_ENABLED	688	680	680
AP_BATTERY_FUELLEVEL_ANALOG_ENABLED	680	672	672
AP_BATTERY_SUM_ENABLED	680	672	672
AP_MOTORS_FRAME_HEXA_ENABLED	672	672	na
AP_RANGEFINDER_LEDDARONE_ENABLED	672	672	672
AP_RANGEFINDER_USD1_SERIAL_ENABLED	640	640	640
AP_RCPROTOCOL_SUMD_ENABLED	616	608	608

FEATURE	PLANE	COPTER	ROVER
HAL_TORQEEDO_ENABLED	608	608	7992
AP_CAMERA_SERVO_ENABLED	600	600	600
AP_RCPROTOCOL_SBUS_ENABLED	592	584	592
AP_COMPASS_EXTERNALAHRS_ENABLED	584	584	600
AP_SBUSOUTPUT_ENABLED	560	472	544
AP_OPTICALFLOW_MAV_ENABLED	552	544	544
AP_CAN_LOGGING_ENABLED	544	416	488
COMPASS_LEARN_ENABLED	512	504	504
AP_RANGEFINDER_HC_SR04_ENABLED	504	504	504
AP_BATTERY_WATT_MAX_ENABLED	496	na	na
AP_OAPATHPLANNER_ENABLED	488	19016	16768
AP_RANGEFINDER_ANALOG_ENABLED	488	480	480
AP_RANGEFINDER_MAVLINK_ENABLED	488	488	488
AP_GENERATOR_IE_650_800_ENABLED	472	464	464
AP_MAVLINK_MSG_MISSION_REQUEST_ENABLED	456	448	448
AP_RANGEFINDER_TERARANGER_SERIAL_ENABLED	448	448	448
AP_RANGEFINDER_NOOPLOOP_ENABLED	440	432	432
AP_RCPROTOCOL_IBUS_ENABLED	440	432	432
AP_AVOIDANCE_ENABLED	432	15680	13232
AP_BATTERY_FUELLEVEL_PWM_ENABLED	392	392	392
AP_BATTERY_SYNTHETIC_CURRENT_ENABLED	392	392	392

FEATURE	PLANE	COPTER	ROVER
AP_RANGEFINDER_LANBAO_ENABLED	392	384	384
AP_RANGEFINDER_GYUS42_V2_ENABLED	384	384	384
AP_MAVLINK_MSG_RELAY_STATUS_ENABLED	376	376	376
AP_RCPROTOCOL_MAVLINK_RADIO_ENABLED	376	368	368
AP_MAVLINK_MAV_CMD_SE_T_HAGL_ENABLED	360	na	na
AP_CAMERA_MAVLINK_ENABLED	352	344	344
AP_RANGEFINDER_LUA_ENABLED	352	352	352
AP_RANGEFINDER_MAXBOTIX_SERIAL_ENABLED	352	344	344
AP_MOTORS_FRAME_DODECAHEXA_ENABLED	344	344	na
AC_PRECLAND_COMPANION_ENABLED	320	312	312
AP_EFI_MAV_ENABLED	312	312	312
AP_CAMERA_RELAY_ENABLED	304	296	296
AP_MOTORS_FRAME_DECA_ENABLED	296	296	na
HAL_SPRAYER_ENABLED	280	1224	1016
AP_FILESYSTEM_FORMAT_ENABLED	272	272	272
AP_RANGEFINDER_BENEWAKE_CAN_ENABLED	272	264	264
AP_NOTIFY_NEOPIXEL_ENABLED	264	264	264
AP_INERTIALSENSOR_KILL_I_MU_ENABLED	256	240	240
AP_MAVLINK_SERVO_RELAY_ENABLED	256	248	248
AP_RANGEFINDER_TOFSENSEP_CAN_ENABLED	256	256	256

FEATURE	PLANE	COPTER	ROVER
AP_AIRSPPEED_ANALOG_ENABLED	248	248	248
AP_NOTIFY_PROFILED_ENABLED	224	216	216
AP_MAVLINK_MSG_RC_CHANNELS_RAW_ENABLED	216	208	208
AP_RANGEFINDER_USD1_CAN_ENABLED	216	208	208
AP_RCPROTOCOL_PPMSUM_ENABLED	216	208	208
AP_CAMERA_SEND_THERMAL_RANGE_ENABLED	176	176	176
AP_RPM_HARMONICNOTCH_ENABLED	176	176	176
AP_RANGEFINDER_BENEWAKE_TF02_ENABLED	144	144	144
AP_MAVLINK_MSG_VIDEO_STREAM_INFORMATION_ENABLED	136	136	136
AP_RANGEFINDER_BENEWAKE_TF03_ENABLED	136	136	136
AP_RANGEFINDER_BENEWAKE_TFMINI_ENABLED	136	136	136
AP_RPM_GENERATOR_ENABLED	136	128	128
AP_RPM_EFI_ENABLED	128	128	128
AP_RPM_ESC_TELEM_ENABLED	128	120	120
AP_NOTIFY_MAVLINK_PLAY_TUNE_SUPPORT_ENABLED	96	88	88
AP_PROXIMITY_RANGEFINDER_ENABLED	80	792	792
AP_WINCH_ENABLED	64	5060	64
AP_MISSION_NAV_PAYLOAD_PLACE_ENABLED	40	2096	32
AP_AIS_ENABLED	24	1048	7404
AP_PROXIMITY_CYGBOT_ENABLED	na	936	936

FEATURE	PLANE	COPTER	ROVER
AP_PROXIMITY_MR72_ENABLED	na	na	na
AP_SERIALMANAGER_IMUOUT_ENABLED	na	na	na
AP_TEMPCALIBRATION_ENABLED	na	1328	na
AP_WINCH_DAIWA_ENABLED	na	2452	na
AP_WINCH_PWM_ENABLED	na	560	na
HAL_HOTT_TELEM_ENABLED	na	na	na
HAL_MOUNT_XFROBOT_ENABLED	na	na	na
MODE_BRAKE_ENABLED	na	688	na
MODE_FLIP_ENABLED	na	1296	na
MODE_FLOWHOLD_ENABLED	na	4616	na
MODE_FOLLOW_ENABLED	na	2296	1488
MODE_GUIDED_NOGPS_ENABLED	na	240	na
MODE_SPORT_ENABLED	na	na	na
MODE_SYSTEMID_ENABLED	na	4208	na
MODE_TURTLE_ENABLED	na	1896	na
MODE_ZIGZAG_ENABLED	na	4784	na
AP_COPTER_AHRS_AUTO_TRIM_ENABLED	na	472	na
AP_DRONECAN_VOLZ_FEEDBACK_ENABLED	na	na	na
AP_INERTIALSENSOR_FAST_SAMPLE_WINDOW_ENABLED	na	2968	na
AP_PROXIMITY_LIGHTWARE_SF40C_ENABLED	na	1816	1816
AP_PROXIMITY_LIGHTWARE_SF45B_ENABLED	na	1760	1760
AP_PROXIMITY_RPLIDARA2_ENABLED	na	1504	1504

