ACC Shared Memory v1.0.8

Field is working as intended
Field is not used by ACC
New / reworked entry(/ies)s since last build
* indicates double fields

Order of wheels:

Front Left	FL
Front Right	FR
Rear Left	RL
Rear Right	RR

SPageFilePhysics

The following members change at each graphic step. They all refer to the player's car.

int packetId	Current step index
float gas	Gas pedal input value (from -0 to 1.0)
float brake	Brake pedal input value (from -0 to 1.0)
float fuel	Amount of fuel remaining in kg
int gear	Current gear
int rpm	Engine revolutions per minute
float steerAngle	Steering input value (from -1.0 to 1.0)
float speedKmh	Car speed in km/h
float velocity[3]	Car velocity vector in global coordinates
float accG[3]	Car acceleration vector in global coordinates
float wheelSlip[4]	Tyre slip for each tyre [FL, FR, RL, RR]
float wheelLoad[4]	Wheel load for each tyre [FL, FR, RL, RR]
float wheelPressure[4]	Tyre pressure [FL, FR, RL, RR]
float wheelAngularSpeed[4]	Wheel angular speed in rad/s [FL, FR, RL, RR]
float tyreWear[4]	Tyre wear [FL, FR, RL, RR]
float tyreDirtyLevel[4]	Dirt accumulated on tyre surface [FL, FR, RL, RR]
float TyreCoreTemp[4] *	Tyre rubber core temperature [FL, FR, RL, RR]
float camberRAD[4]	Wheels camber in radians [FL, FR, RL, RR]
float suspensionTravel[4]	Suspension travel [FL, FR, RL, RR]
float drs	DRS on
float tc **	TC in action
float heading	Car yaw orientation
float pitch	Car pitch orientation

float roll	Car roll orientation
float cgHeight	Centre of gravity height
float carDamage[5]	Car damage: front 0, rear 1, left 2, right 3, centre 4
int numberOfTyresOut	Number of tyres out of track
int pitLimiterOn	Pit limiter is on
float abs ***	ABS in action
float kersCharge	Not used in ACC
float kersInput	Not used in ACC
int autoshifterOn	Automatic transmission on
float rideHeight[2]	Ride height: 0 front, 1 rear
float turboBoost	Car turbo level
float ballast	Car ballast in kg / Not implemented
float airDensity	Air density
float airTemp	Air temperature
float roadTemp	Road temperature
float localAngularVel[3]	Car angular velocity vector in local coordinates
float finalFF	Force feedback signal
float performanceMeter	Not used in ACC
int engineBrake	Not used in ACC
int ersRecoveryLevel	Not used in ACC
int ersPowerLevel	Not used in ACC
int ersHeatCharging	Not used in ACC
int ersIsCharging	Not used in ACC
float kersCurrentKJ	Not used in ACC
int drsAvailable	Not used in ACC
int drsEnabled	Not used in ACC
float brakeTemp[4]	Brake discs temperatures
float clutch	Clutch pedal input value (from -0 to 1.0)
float tyreTempI[4]	Not shown in ACC
float tyreTempM[4]	Not shown in ACC
float tyreTempO[4]	Not shown in ACC
int isAIControlled	Car is controlled by the AI
float tyreContactPoint[4][3]	Tyre contact point global coordinates [FL, FR, RL, RR] [x,y,z]
float tyreContactNormal[4][3]	Tyre contact normal [FL, FR, RL, RR] [x,y,z]
float tyreContactHeading[4][3]	Tyre contact heading [FL, FR, RL, RR] [x,y,z]
float brakeBias	Front brake bias
float localVelocity[3]	Car velocity vector in local coordinates
int P2PActivation	Not used in ACC
int P2PStatus	Not used in ACC
float currentMaxRpm	Maximum engine rpm
float mz[4]	Not shown in ACC

float fx[4]	Not shown in ACC
float fy[4]	Not shown in ACC
float slipRatio[4]	Tyre slip ratio [FL, FR, RL, RR]
float slipAngle[4]	Tyre slip angle [FL, FR, RL, RR]
int tcinAction **	TC in action
int absInAction ***	ABS in action
float suspensionDamage[4]	Suspensions damage levels [FL, FR, RL, RR]
float tyreTemp[4] *	Tyres core temperatures [FL, FR, RL, RR]
Float waterTemp	Water Temperature

SPageFileGraphic

The following members are updated at each graphical step. They mostly refer to player's car except for carCoordinates and carID, which refer to the cars currently on track.

int packetId	Current step index
ACC_STATUS status	See enums ACC_STATUS **(Always 2)**
ACC_SESSION_TYPE session	See enums ACC_SESSION_TYPE
wchar_t currentTime[15]	Current lap time in wide character
wchar_t lastTime[15]	Last lap time in wide character
wchar_t bestTime[15]	Best lap time in wide character
wchar_t split[15]	Last split time in wide character
int completedLaps *	No of completed laps
int position	Current player position
int iCurrentTime	Current lap time in milliseconds
int iLastTime	Last lap time in milliseconds
int iBestTime	Best lap time in milliseconds
float sessionTimeLeft	Session time left
float distanceTraveled	Distance travelled in the current stint
int isInPit	Car is pitting
int currentSectorIndex	Current track sector
int lastSectorTime	Last sector time in milliseconds
int numberOfLaps *	Number of completed laps
wchar_t tyreCompound[33]	Tyre compound used
float replayTimeMultiplier	Not used in ACC
float normalizedCarPosition	Car position on track spline (0.0 start to 1.0 finish)
int activeCars	Number of cars on track
float carCoordinates[60][3]	Coordinates of cars on track
int carID[60]	Car IDs of cars on track
int playerCarID	Player Car ID
float penaltyTime	Penalty time to wait

ACC_FLAG_TYPE flag	See enums ACC_FLAG_TYPE
ACC_PENALTY_TYPE penalty	See enums ACC_PENALTY_TYPE
int idealLineOn	Ideal line on
int isInPitLane	Car is in pit lane
float surfaceGrip	Ideal line friction coefficient
int mandatoryPitDone	Mandatory pit is completed
float windSpeed	Wind speed in m/s
float windDirection	wind direction in radians
int isSetupMenuVisible	Car is working on setup
int mainDisplayIndex	current car main display index, see appendix 1
int secondaryDisplyIndex	current car secondary display index
int TC	Traction control level
int TCCUT	Traction control cut level
int EngineMap	Current engine map
int ABS	ABS level
float fuelXLap	Average fuel consumed per lap in liters
int rainLights	Rain lights on
int flashingLights	Flashing lights on
int lightsStage	Current lights stage
float exhaustTemperature	Exhaust temperature
int wiperLV	Current wiper stage
int driverStintTotalTimeLeft	Time the driver is allowed to drive per race in milliseconds
int driverStintTimeLeft	Time the driver is allowed to drive per stint in milliseconds
int rainTyres	Are rain tyres equipped
int sessionIndex	
float usedFuel	Used fuel since last time refueling
wchar_t deltaLapTime[15]	Delta time in wide character
int iDeltaLapTime	Delta time time in milliseconds
wchar_t estimatedLapTime [15]	Estimated lap time in milliseconds
int iEstimatedLapTime	Estimated lap time in wide character
int isDeltaPositive	Delta positive (1) or negative (0)
int iSplit	Last split time in milliseconds
int isValidLap	Check if Lap is valid for timing

SPageFileStatic

The following members are initialized when the instance starts and never changes until the instance is closed.

wchar_t smVersion[15]	Shared memory version
wchar_t acVersion[15]	Assetto Corsa version
int numberOfSessions	Number of sessions
int numCars	Number of cars
wchar_t carModel[33]	Player car model
wchar_t track[33]	Track name
wchar_t playerName[33]	Player name
wchar_t playerSurname[33]	Player surname
wchar_t playerNick[33]	Player nickname
int sectorCount	Number of sectors
float maxTorque	Not shown in ACC
float maxPower	Not shown in ACC
int maxRpm	Maximum rpm
float maxFuel	Maximum fuel tank capacity
float suspensionMaxTravel[4]	Not shown in ACC
float tyreRadius[4]	Not shown in ACC
float maxTurboBoost	Maximum turbo boost
float deprecated_1	
float deprecated_2	
int penaltiesEnabled	Penalties enabled
float aidFuelRate	Fuel consumption rate
float aidTireRate	Tyre wear rate
float aidMechanicalDamage	Mechanical damage rate
float AllowTyreBlankets	Not allowed in Blancpain endurance series
float aidStability	Stability control used
int aidAutoclutch	Auto clutch used
int aidAutoBlip	Always true in ACC
int hasDRS	Not used in ACC
int hasERS	Not used in ACC
int hasKERS	Not used in ACC
float kersMaxJ	Not used in ACC
int engineBrakeSettingsCount	Not used in ACC
int ersPowerControllerCount	Not used in ACC
float trackSplineLength	Not used in ACC
wchar_t trackConfiguration	Not used in ACC
float ersMaxJ	Not used in ACC

int isTimedRace	Not used in ACC
int hasExtraLap	Not used in ACC
wchar_t carSkin[33]	Not used in ACC
int reversedGridPositions	Not used in ACC
int PitWindowStart	Pit window opening time
int PitWindowEnd	Pit windows closing time
int isOnline	If is a multiplayer session

Enums

ACC_FLAG_TYPE

ACC_NO_FLAG = 0
ACC_BLUE_FLAG = 1
ACC_YELLOW_FLAG = 2
ACC_BLACK_FLAG = 3
ACC_WHITE_FLAG = 4
ACC_CHECKERED_FLAG = 5
ACC_PENALTY_FLAG = 6

ACC_PENALTY_TYPE

ACC_None = 0
ACC_DriveThrough_Cutting = 1
ACC_StopAndGo_10_Cutting = 2
ACC_StopAndGo_20_Cutting = 3
ACC_StopAndGo_30_Cutting = 4
ACC_Disqualified_Cutting = 5
ACC_RemoveBestLaptime_Cutting = 6
ACC_DriveThrough_PitSpeeding = 7
ACC_StopAndGo_10_PitSpeeding = 8
ACC_StopAndGo_20_PitSpeeding = 9
ACC_StopAndGo_30_PitSpeeding = 10
ACC_Disqualified_PitSpeeding = 11
ACC_RemoveBestLaptime_PitSpeeding = 12
ACC_Disqualified_IgnoredMandatoryPit = 13
ACC_PostRaceTime = 14
ACC_Disqualified_Trolling = 15
ACC_Disqualified_PitEntry = 16
ACC_Disqualified_PitExit = 17
ACC_Disqualified_Wrongway = 18
ACC_DriveThrough_IgnoredDriverStint = 19

ACC_Disqualified_IgnoredDriverStint = 20
ACC_Disqualified_ExceededDriverStintLimit = 21

ACC_SESSION_TYPE

ACC_UNKNOWN = -1
ACC_PRACTICE = 0
ACC_QUALIFY = 1
ACC_RACE = 2
ACC_HOTLAP = 3
ACC_TIMEATTACK = 4
ACC_DRIFT = 5
ACC_DRAG = 6
ACC_HOTSTINT = 7
ACC_HOTSTINTSUPERPOLE = 8

ACC_STATUS

ACC_OFF = 0
ACC_REPLAY = 1
ACC_LIVE = 2
ACC_PAUSE = 3

ACC_WHEELS_TYPE

ACC_FrontLeft = 0
ACC_FrontRight = 1
ACC_RearLeft = 2
ACC_RearRight = 3

Appendix 1 – mainDisplayIndex

	Page 1	Page 2	Page 3	Page 4
Aston Martin Vantage V12 GT3 2013	0	1		
Audi R8 LMS 2015	0	1	2	3
Bentley Continental GT3 2015	0	1		
Bentley Continental GT3 2018	0	1	2	
BMW M6 GT3 2017	0			
Emil Frey Jaguar G3 2012	0	1		
Ferrari 488 GT3 2018	0	1	2	
Honda NSX GT3 2017	0			
Lamborghini Gallardo G3 Reiter 2017	0	1		
Lamborghini Huracan GT3 2015	4	0	2	3
Lamborghini Huracan ST 2015	0			
Lexus RCF GT3 2016	0			
McLaren 650S GT3 2015	0	1	2	4
Mercedes AMG GT3 2015	0	1		
Nissan GTR Nismo GT3 2015	1	3	4	0
Nissan GTR Nismo GT3 2018	1	3	4	0
Porsche 991 GT3 R 2018	0	1	2	3
Porsche9 91 II GT3 Cup 2017	0	1	2	3