

Agilent 1290 Infinity System

Firmware Bulletin

B.06.3x

G4212A DAD
G4220A Binary Pump
G4226A ALS
G1316C TCC
G4227A FlexCube
G4208A Instant Pilot



Agilent Technologies

Notices

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Revision

This technical note is valid for the Agilent 1290 Infinity System Firmware.

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Document History

The table below lists all changes that have been made to this document.

NOTE

Do not mix firmware revisions from this set (B.06.3x) with earlier revisions (B.06.2x). Due to new functionality (e.g. introduction of the G4227A Infinity FlexCube) the firmware of all 1290 Infinity modules must be on this set.

Table 1 Document History, 3

Date	Description	Author
4-May-2010	Release of new firmware (FlexCube release) "Core Changes A.06.30", "Core Changes B.06.30 (modules with on-board LAN)" "G4220A Infinity Binary Pump B.06.30" "G4212A Infinity DAD B.06.30" "G4226A Infinity Autosampler A.06.30" "G1316C Infinity TCC A.06.30" "G4227A Infinity FlexCube C.06.30" "1290 Infinity LC - Compatibility Information"	W. Albrecht

For firmware revisions below B.06.30 refer to the firmer history documentation B.06.2x.

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Visit the Agilent web

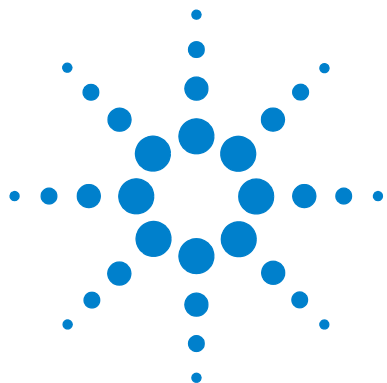
http://www.chem.agilent.com/scripts/cag_firmware.asp?nmod=LC

for

- older Firmware History documents
- download tools and
- instructions

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This chapter provides the details of the various firmware revisions for the Agilent 1290 Infinity System.



Firmware Revision Overview

For firmware revisions below B.06.30 refer to the firmware history documentation B.06.2x.

NOTE

Do not mix firmware revisions from this set (B.06.3x) with earlier revisions (B.06.2x). Due to new functionality (e.g. introduction of the G4227A Infinity FlexCube) the firmware of all 1290 Infinity modules must be on this set. The minimum resident firmware must be as shown in the table below. Otherwise the FlexCube G4227A will not work.

Table 2 [Firmware Revision Overview](#)

Type	Module	Product#	Revision	Build	Filename (.DLB)	Initial New
Main						
	1290 Infinity DAD	G4212A	B.06.30	006	4212A_B630_006	N
	1290 Infinity Binary Pump	G4220A	B.06.30	006	4220A_B630_006	N
	1290 Infinity Autosampler	G4226A	A.06.30	005	4226A_A630_005	N
	1290 Infinity TCC	G1316C	A.06.30	004	1316C_A630_004	N
	1290 Infinity FlexCube	G4227A	C.06.30	004	4227A_C630_004	I
	Instant Pilot (does not support the G4227A FlexCube)	G4208A	B.02.09	003	4208A_B209_003	N
Resident						
	1290 Infinity DAD and Binary Pump		B.06.30	006	Res_B630_006	N
	1290 Infinity Autosampler and TCC		A.06.30	003	Res_A630_003	N
	1290 Infinity FlexCube		C.06.30	004	Res_C630_004	I
	Instant Pilot	G4208A	B.02.09	003	Res_4208A_B209_003	N

NOTE

The final build number may be higher, depending on late changes.

Core Changes

Table 3 [Core Changes](#) B.06.30 (modules with on-board LAN)

Main firmware revision	4212A_B630_006 , 4220A_B630_006
Resident firmware revision	Res_B630_006
Date Introduced	May1 2010
Bugfix	Team Track #1412: A module sporadically needed a too long time for reboot (up to 1 min).
New Features	- Support of 1290 Infinity FlexCube (G4227A). - Support of new module type G4220B - New instruction FAM? to query the module family (e.g. 1200, 1260, 1290)
OQ/PV Recommendation	No repeat OQ/PV tests are recommended after update

Table 4 **Core Changes A.06.30**

Main firmware revision	4226A_A630_005, 1316C_A630_004
Resident firmware revision	Res_A630_003
Date Introduced	May 2010
Bugfix	• In the general RS-232 driver the INDICATION_BY_CHAR modus did not work. • TeamTrack #01151, #1154 (PVCS #1690): The reply to COM:CONF?4 showed wrongly reply error RE 0752 (OPTION_NOT_INSTALLED) even if option was installed. • TeamTrack #01155, #01357 (PVCS #1694): Fix that the instruction ROCP 0 (for “release occupy when controller has gone”) shows reply error RE 0104. • TeamTrack #01346 (PVCS #1900): Error in leak detection algorithm that a module with defect leak sensor wrongly became ready after clearing the error with instruction CLER. • Sporadic crashes when loading the last element of the default COSY list.
New Features	• Support of 1290 Infinity FlexCube (G4227A). • New instruction FAM? to query the module family (e.g. 1200, 1260, 1290)
Known Problems	None
OQ/PV Recommendation	No repeat OQ/PV tests are recommended after update

G4220A Infinity Binary Pump

Table 5 G4220A Infinity Binary Pump B.06.30

Main firmware revision	4220A_B630_006
Resident firmware revision	Res_B630_006
Date Introduced	May 2010
Bugfix (Core)	See “Core Changes B.06.30 (modules with on-board LAN)” on page 9.
Bugfix	- TeamTrack #01354: Fixed that all bottles were checked if “prevent analysis if level falls before” was enabled with SSV. Now, only those bottles are checked that are part of the method. - Improved detection of motor faults. - Fixed occasional crash at start-up.
New Features	- Implement conditioning (primary air removal). - Support of 1290 Infinity FlexCube (G4227A).
OQ/PV Recommendation	No repeat OQ/PV tests are recommended after update

G4212A Infinity DAD

Table 6 [G4212A Infinity DAD B.06.30](#)

Main firmware revision	4212A_B630_006
Resident firmware revision	Res_B630_006
Date Introduced	May 2010
Bugfix (Core)	• See “Core Changes B.06.30 (modules with on-board LAN)” on page 9.
Bugfix	• None
New Features	• Support of 1290 Infinity FlexCube (G4227A).
OQ/PV Recommendation	No repeat OQ/PV tests are recommended after update

G4226A Infinity Autosampler

Table 7 G4226A Infinity Autosampler A.06.30

Main firmware revision	4226A_A630_005
Resident firmware revision	Res_A630_003
Date Introduced	May 2010
Bugfix (Core)	• See “Core Changes A.06.30” on page 10.
Bugfix	• TeamTrack #1316, #1327 (PVCS #1870, #1881): “Overlapped after time 0” resulting in crashes or errors in COSY-lists. • TeamTrack #1339: Injection valve switching failed after change of working loop. • TeamTrack #1358: The new syringe size was not always accepted for 20 ul and 40 ul syringe in G4226A. • TeamTrack #1349: Module showed Panic after peristaltic pump’s run was stopped with ABRT and started again
New Features	• Support of 1290 Infinity FlexCube (G4227A).
OQ/PV Recommendation	No repeat OQ/PV tests are recommended after update

G1316C Infinity TCC

Table 8 [G1316C Infinity TCC A.06.30](#)

Main firmware revision	1316C_A630_004
Resident firmware revision	Res_A630_003
Date Introduced	May 2010
Bugfix (Core)	• See “Core Changes A.06.30” on page 10.
Bugfix	• Valve switching did not work after downgrading a G1316C to G1316A/B. • Send the “Startup-done” event (EC 0010) after completion of the valve initialization.
New Features	• None
OQ/PV Recommendation	No repeat OQ/PV tests are recommended after update

G4227A Infinity FlexCube

Table 9 [G4227A Infinity FlexCube C.06.30](#)

Main firmware revision	4227A_C630_004
Resident firmware revision	Res_C630_004
Date Introduced	May1 2010
Bugfix	None
New Features	Initial firmware of 1290 Infinity FlexCube
Known Issues	- The Agilent ChemStation B.04.02-SP1 supports this module. - The Instant Pilot B.02.09 does not support the 1290 Infinity FlexCube. The support is planned for later this year.
OQ/PV Recommendation	No repeat OQ/PV tests are recommended after update

G4208A Instant Pilot

Table 10 G4208A Instant Pilot B.02.09

Main firmware revision	4208A_B209_003
Resident firmware revision	Res_4208A_B209_003
Release Date	September 2009
Bugfix	- PVCS #1200: Missing “Save” dialog during modifying method, when using delete line/all in time table. - PVCS #1221: (G4220A) Changes in “Solvent Channel X” or “Injector Program” marks the method as changed '*' but on 'Exit' no “Save changes?” dialog was shown. - PVCS #1222: (G1316C) Actual valve position on status screen The actual position was not shown, only a '-' was visible. Also after the valve switched the actual position stays at '-'. - PVCS #1229: Aborted wavelength calibration written into DAD logbook without mention of the abort. - PVCS #1231: (NUCLEUS) New events for LongNotReady and 1290 Pump NotReady. There are 3 new events send from firmware to indicate changes in long not ready bits. They are shown as unknown in the earlier revisions. The 1290 Pump has implemented additional not ready conditions (TUNING, DEFILL, REMOVE_AIR). - PVCS #1237 (in B.02.08 only): The illumination of G4226A (1290 Infinity ALS) is missing. Neither the light at a new G4226A is switched on nor the user interface for illumination is available. - PVCS #1238 (in B.02.08 only): An Instant Pilot (G4208A) connected to a 1290 Infinity LC System and running firmware revision B.02.08 freezes after power-cycling the LC System. - And minor changes in screens and help text.
New Features	(G4220A) Added a line in status tile “Dynamic Pressure Limit” that indicates the currently used pressure limit.
Known Problems	Compatibility Issues: Instant Pilots with firmware B.02.09, B.02.08 and B.02.07 and new main board cannot be downgraded to B.02.06 and below (also not to A.05.13). This shows up on Instant Pilots manufactured in Malaysia - with MY... serial numbers and B.02.09 installed).
OQ/PV Recommendation	No repeat OQ/PV tests are recommended after update

1290 Infinity LC - Compatibility Information

The table below lists the compatibility requirements for the 1290 Infinity LC System.

Table 11 Firmware/Software Requirements for 1290 Infinity LC System

1290 Infinity LC System	Revision	Revision	Comment
• G4212A Infinity DAD	B.06.23 *	B.06.30	
• G4220A Infinity Binary Pump	B.06.23 *	B.06.30	
• G4226A Infinity ALS	A.06.14 *	A.06.30	
• G1316C Infinity TCC	A.06.14 *	A.06.30	
• G4227A Infinity FlexCube		C.06.30 **	see foot note below.
• G4208A Instant Pilot	B.02.08 *	B.02.09***	1290 release usable for firmware updates
• Agilent 1100/1200 modules	B.06.2x	B.06.2x/3x	modules with on-board LAN
• Agilent 1100/1200 modules	A.06.1x	A.06.1x/3x	
• Agilent ChemStation	B.04.02 *	B.04.02 SP1	
• Agilent LabAdvisor / System Utilities	B.01.03 *	B.01.03 SP4	usable for firmware updates
• LAN/RS-232 Firmware Update Tool	2.6	2.7	usable for firmware updates

* initial revision or revision that supports the 1290 Infinity modules the first time.

** If the 1290 Infinity FlexCube is part of the system, all 1290 Infinity LC modules must be on firmware A.06.30/B.06.30, see [Table 2](#) on page 8.

***does not support the 1290 Infinity FlexCube. ChemStation B.04.02 SP1 required.

NOTE

Due to a new driver concept the initial Agilent ChemStation B.04.02 release does not support all combinations of 1290 Infinity LC System with 1100/1200 modules, see [Figure 1](#) on page 18.

1 Change Information

1290 Infinity LC - Compatibility Information

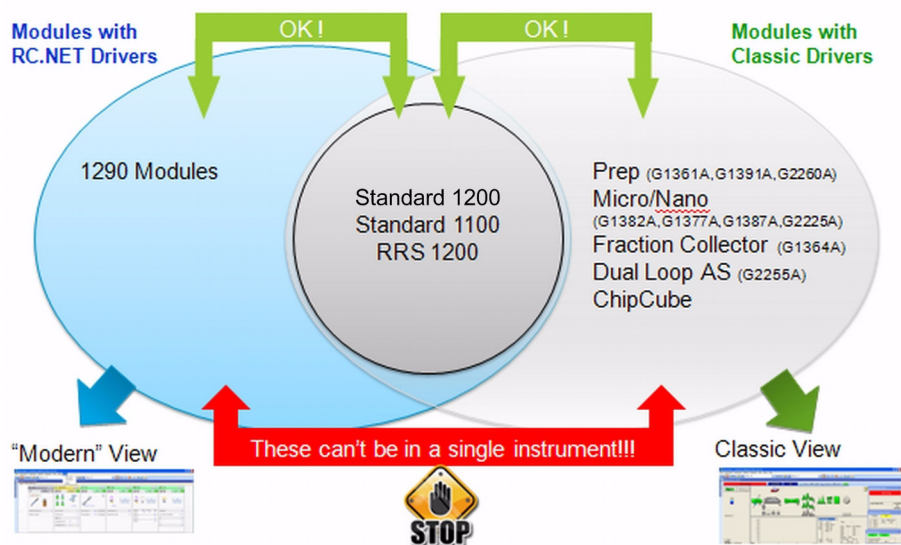


Figure 1 Agilent ChemStation B.04.02 vs. 1290 and 1100/1200 modules

For a complete compatibility matrix contact your local Agilent ChemStation Support.

www.agilent.com

In This Book

This bulletin contains information about the firmware revision for the Agilent 1290 Infinity System.

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