The table below lists proofs of Fermat number and Fermat cofactor compositeness that were collected from mersenneforum, papers and emails. Verifications done as part of this study are also included.
For each Fermat number or cofactor, the earliest prover is shown in **bold**. Two provers are shown in bold when their proofs were done almost simultaneously and independently.
"Proof Strength" is a grade based on all the proofs performed to date, as defined in the footnotes below the table. Note that sometimes the set of proofs that deterine the Proof Strength (highlighted) do not include the earliest proof.

	Factors	Proof Strength	Who (Earliest)	MF Name	When	Program	Version	Test Type	Pepin R or Type 1		Suyama (Type 5) A = R^2 mod F		Suyama B = 3^(P-1) mod F		Suyama (A - B) mod C		Publication Reference	Notes
									Res 64 (hex)	Res 2^35-1 2^36-1 (dec)	Res 64 (hex)	Res 2^35-1 2^36-1 (dec)	Res 64 (hex)	Res 2^35-1 2^36-1 (dec)	Res 64 (hex)	Res 2^35-1 2^36-1 (dec)		
F20	0	A+	**Young and Buell**	-	4/6/1987	custom	?	Pepin	78791573ED3DE5F1	152658139636 35626292569	-	-	-	-	-	-	Math Comp Paper F20	Run on Cray-2 and Cray-XMP. Program called same Cray FFT libarary on both systems.
			Gary Gostin	Gary	5/9/2023	cofact	0.3	Pepin	78791573ED3DE5F1	152658139636 35626292569	-	-	-	-	-	-		
F21	1	A+	**Crandall et al.**	-	11/23/1993	multiple custom	-	5	539841840	309819635973002576 43	A07023647D4284D5	123516046431128036785 3	DA11FF47C9F2DBA7	58038235525506585220	1A6B2145AEB90471	157197075121894233216 7	Math Como Paper F22	F22 paper tested F19 and F21 cofactors. Amdhal and checkine workstations used different software.
			Gary Gostin	Gary	5/9/2023	cofact	0.3	5	C4AE66D539841840	309819635973002576 43	A07023647D4284D5	123516046431128036785 3	DA11FF47C9F2DBA7	58038235525506585220	1A6B2145AEB90471	157197075121894233216 7		
			Catherine Cowie	cxc	3/1/2024	Mlucas	21.0.a	5	C4AE66D539841840	309819635973002576 43	A07023647D4284D5	123516046431128036785 3	DA11FF47C9F2DBA7	58038235525506585220	1A6B2145AEB90471	157197075121894233216 7	MF 651567	
F22	1	A+	**Dmitry Domanov**	unconnected	3/26/2010	Prime95?	?	1	BEAE94F64C12B741		-	-	-	-	-	-	MF 209664	
			Shoichiro Yamada	msft	4/6/2010	mprime & genefer	?	1	BEAE94F64C12B741		-	-	-	-	-	-	MF 210816	
			Catherine Cowie	cxc	4/15/2023	mprime	30.10	1	BEAE94F64C12B741		-	-	-	-	-	-	MF 628504	
			Andrew Usher	Andrew Usher	4/15/2023	Prime95	?	1	BEAE94F64C12B741		-	-	-	-	-	-	MF 628529	
			Crandall et al.	-	11/23/1993	multiple custom	-	Pepin		.....3A09D72A	12323430823 8733349067						Math Como Paper F22	Proof of compositeness paper became obsolete when F22 factored in 2010
			Catherine Cowie	cxc	4/3/2023	mprime	30.10	5		1B7A892DC7F0EC35							MF 628360	
			Gary Gostin	Garv	5/9/2023	cofact	0.3	5	77F6FA403A09D72A	12323430823 8733349067	1B7A892DC7F0EC35	213591200636299405051 5	F2F13497115814AD	31225537268 58598662170	8F2B6FC5AA6AF96A	5450609407 30570899199		
			Catherine Cowie	cxc	3/1/2024	Mlucas	21.0.a	5	77F6FA403A09D72A	12323430823 8733349067	1B7A892DC7F0EC35	213591200636299405051 5	F2F13497115814AD	31225537268 58598662170	8F2B6FC5AA6AF96A	5450609407 30570899199	MF 651567	
F23	1	A+	**Crandall et al.**	-	Nov 2000	multiple custom	-	5	5OE1F11B551968BB	4259642653 60596902712	14E2143DD7E57ABB						Math Como Paper F24	F24 paper tested F23 cofactor; 2002 Mayer email provided the date, Pepin residues, and that diff HW and SW were used to get matching Pepin residues. But no final Suyama residues were provided.
			Gary Gostin	Gary	4/18/2023	mprime	30.8	5			14E2143DD7E57ABB							
			Gary Gostin	Garv	5/10/2023	cofact	0.3	5	5OE1F11B551968BB	4259642653 60596902712	14E2143DD7E57ABB	272484447610275710011	1029BE52A5446CDA	30503685687479207381 6	5574287CB972658A	8874908179 13707222996		
			Catherine Cowie	cxc	2/29/2024	Mlucas	21.0.a	5	5OE1F11B551968BB		14E2143DD7E57ABB	272484447610275710011	1029BE52A5446CDA	30503685687479207381 6	5574287CB972658A	8874908179 13707222996	MF 651559	
F24	0	A+	**Crandall et al.**	-	8/27/1999	multiple custom	-	Pepin	1731187E131E106C	32898231088 68627742455	-	-	-	-	-	-	Math Comp Paper F24	Two wavefront machines, plus checking drones running different software. Date is for the first R24 residue produced
			Gary Gostin	Gary	5/10/2023	cofact	0.3	Pepin	1731187E131E106C	32898231088 68627742455	-	-	-	-	-	-		
F25	3	A+	**Shoichiro Yamada**	msft	7/23/2009	genefer	?	1	none provided			-	-	-	-	-	MF 182339	No residues reported in Yamada's MF post or emails to Wilfrid Keller. His emails imply that he may have compared his residue to the one reported by Hoeglund.
			Andreas Hoeglund	ATH	8/3/2009	Prime95	?	1	44BFC8D231602007		-	-	-	-	-	-	MF 183825	
			"Yar"	yorix	10/30/2017	Prime95	29.3	1	44BFC8D231602007		-	-	-	-	-	-	MF 470621	
			"Yar"	yorix	10/28/2017	Prime95	29.4	5		786B0878B4A45562							MF 470505	
			Ernst Mayer	ewmayer	5/13/2022	Mlucas	v21 proto	5	CB913B6E3B1FFE2A	9073733940 15369168494	786B0878B4A45562	26994100025 66886679148	2909830729BFA110	30348546187 21153567739	7A5518934CF4B4E4E	34178045549 65496009072	MF 605834	
			Gary Gostin	Gary	5/10/2023	cofact	0.3	5	CB913B6E3B1FFE2A		786B0878B4A45562	26994100025 66886679148	2909830729BFA110	30348546187 21153567739	7A5518934CF4B4E4E	34178045549 65496009072		
			Gary Gostin	Gary	5/21/2023	mprime+cofact	30.8+0.4	5			786B0878B4A45562	26994100025 66886679148	2909830729BFA110	30348546187 21153567739	7A5518934CF4B4E4E	34178045549 65496009072		
F26	1	A+	**Andreas Hoeglund**	ATH	9/18/2009	Prime95	?	1	6C433D4E3CC9522E		-	-	-	-	-	-	MF 190270	
			"Yar"	yorix	12/21/2017	Prime95	29.4	1	6C433D4E3CC9522E								MF 474496	
			"Yar"	yorix	12/21/2017	Prime95	29.4	5		FB8406B3A281838C							MF 474496	
			Ernst Mayer	ewmayer	5/13/2022	Mlucas	v21 proto	5	2B58BDE2A0C14045	968928787 2307231107	FB8406B3A281838C	2193939191 7371940776	25F5AB0FFC728CB7	32173443562 20444894301	B7BD14979ACF222E	6416457631 15466936163	MF 605834	
			Gary Gostin	Gary	5/12/2023	cofact	0.3	5	2B58BDE2A0C14045		FB8406B3A281838C	2193939191 7371940776	25F5AB0FFC728CB7	32173443562 20444894301	B7BD14979ACF222E	6416457631 15466936163		
			Gary Gostin	Gary	5/21/2023	mprime+cofact	30.8+0.4	5			FB8406B3A281838C	2193939191 7371940776	25F5AB0FFC728CB7	32173443562 20444894301	B7BD14979ACF222E	6416457631 15466936163		
F27	2	A+	**Andreas Hoeglund**	ATH	4/4/2010	Prime95	?	1	481F26965DE16117		-	-	-	-	-	-	MF 210563	Residues each 1M iter at http://www.hoegge.dk/mersenne/F27residues.txt
			Ernst Mayer	ewmayer	5/13/2022	Mlucas	v21 proto	5	043A6CB892728297	30710305624 39732934618	C38191C45CCD7820	21887650168 55240256170	485F292142F953EC	20036545122 26481669619	79E89190C5637287	2608954171 29330680430	MF 605834	
			Gary Gostin	Gary	5/21/2023	mprime+cofact	30.8+0.4	5			C38191C45CCD7820	21887650168 55240256170	485F292142F953EC	20036545122 26481669619	79E89190C5637287	2608954171 29330680430		
F28	1	A+	**Ernst Mayer**	ewmayer	5/13/2022	Mlucas	v21 proto	5	468731C366F13E8F	30476727665 9104636564	7CAE1275B362B2CA	20461105324 30894284803	BD496177DB5155A0	33633822046 3778945069	790BE051D7D667E	4159568998 55362539930	MF 605834	
			Gary Gostin	Gary	7/16/2023	mprime+cofact	30.8+0.7	5			7CAE1275B362B2CA	20461105324 30894284803	BD496177DB5155A0	33633822046 3778945069	790BE051D7D667E	4159568998 55362539930		
F29	1	A+	**Ernst Mayer**	ewmayer	5/13/2022	Mlucas	v21 proto	5	BECE1E5FFBE5EC12	17796269382 21246329964	98D416D83918C152	32748692453 58920206666	30AFC6010F628848	7473784009 6544795868	AB3DBCEFF907786	13349243207 41564307636	MF 605834	
			"mathwiz"	mathwiz	11/1/2023	mprime+cofact	30.14+0.8	5	BECE1E5FFBE5EC12		98D416D83918C152	32748692453 58920206666	30AFC6010F628848	7473784009 6544795868	AB3DBCEFF907786	13349243207 41564307636	MF 642130	
F30	2	B+	**Ernst Mayer**	ewmayer	5/13/2022	Mlucas	v21 proto	5	A70C2A3D898D6D9D	26425548225 59810773698	1D7AA56A5428333C	30698378043 40327643421	6F85686048ZD3F4E	9072042323 48656226334	EDFCEFFC50271D44	9723857098 34401987830	MF 605834	
			tbd	tbd	tbd	tbd	tbd	tbd										mprime 30.8 reports that the number is too large for it's FFTs without AVX-512

A Matching residues (at least Res64) covering the bulk of the calculations were produced using different hardware running different software, including different math libraries.
B Matchine residues (at least Res64) covering the bulk of the calculations were produced using different hardware runnine the same software with different configurations. such as different FFT leneths.
C Matching residues (at least Res64) covering the bulk of the calculations were produced using different hardware running the same software with the same configuration.
\+ Added if matching Res 64 and Selfridge-Hurwitz residues exist for the final residue: Pepin (for F20 and F24); Type 1 or Suyama for the cofactors.